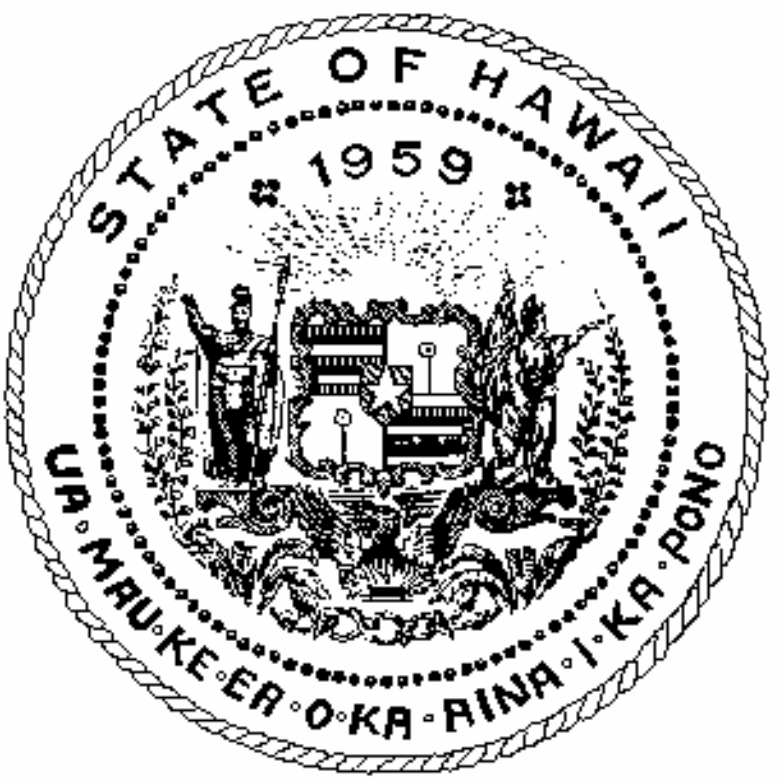
CORRECTIONS POPULATION MANAGEMENT COMMISSION



ANNUAL REPORT 2003

January 2004

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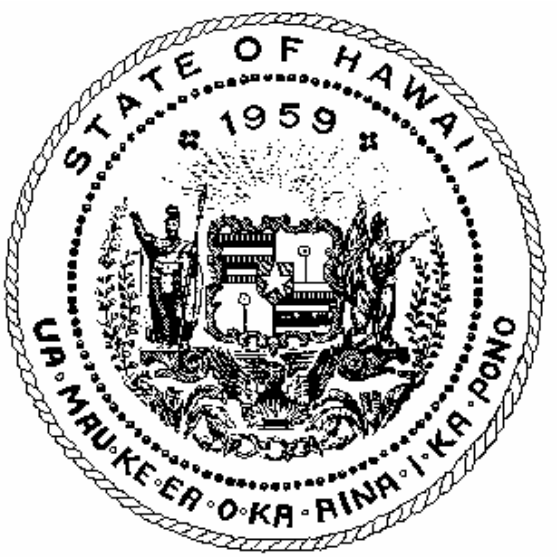
The Sentencing Simulation Model Project is supported by the U.S. Bureau of Justice Assistance, Edward Byrne Memorial State and Local Law Enforcement Justice Assistance formula grant.

CORRECTIONS POPULATION MANAGEMENT COMMISSION



ANNUAL REPORT 2003

Sentencing Simulation Model Project (SSMP)
Corrections Populations: Trends & Projections (1994-2008)

January 2004

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Molly Kau

ACKNOWLEDGEMENTS

The use of a simulation model in order to do forecasts of criminal justice populations is complex in nature and often requires years for proper development and implementation. The Sentencing Simulation Model Project (SSMP) has been fortunate enough to have a national expert in criminal justice forecasting contribute his services to its efforts, and progress things to an advanced level in a relatively short period of time. That said, the Project cannot express enough gratitude to the invaluable consultation given by Dr. Pablo Martinez, Professor, Department of Criminal Justice, Texas State University (and formerly the Director of Special Projects at the Texas Criminal Justice Policy Council). Dr. Martinez has shared his many years of knowledge and experience in constructing, developing, and maintaining a sentencing simulation model and producing criminal justice forecasts. His instruction and advice have been a key force behind the milestones reached and obstacles overcome by the SSMP to-date.

The construction and maintenance of a criminal justice system simulation model involves pulling together and making sense of data collected and/or researched from a host of different State criminal justice agencies. Currently, this includes: Department of Public Safety, Hawaii Paroling Authority, Adult Probation Division, Hawaii Criminal Justice Data Center and Crime Prevention & Justice Assistance Division – Department of the Attorney General, and The Judiciary. Without the knowledge and assistance from agency personnel, the ability to navigate the data from within each agency and cross-agencies would have been a task of epic proportions. The SSMP wishes to express its appreciation to the following people and agencies for their assistance in providing/researching data, maintaining current data systems, and sharing their expertise on their data and systems:

Ken Hashi, Research Statistician, Department of Public Safety; Cheryl Rodrigues, Research Statistician, Department of Public Safety; Mike Mamitsuka, Data Processing Systems Analyst, Department of Public Safety; Suzy Ucol, Data Processing Systems Analyst, Department of Public Safety; John Maruyama, Information Systems Chief, Hawaii Criminal Justice Data Center, Department of the Attorney General; Ron Hajime, Administrator, Adult Probation Division, Circuit Court of the First Circuit; Sonny Lim, Data Technician, Adult Probation Division, Circuit Court of the First Circuit; Tommy Johnson, Paroles & Pardons Administrator, Hawaii Paroling Authority; Winnie Jou, Account Clerk, Hawaii Paroling Authority; Jessie Macadamia, Secretary, Hawaii Paroling Authority; Janet Davidson, Senior Research Analyst, Crime Prevention & Justice Assistance Division, Department of the Attorney General; Statistics Office of the Judiciary; and Peter Mo, Data Processing Systems Analyst, Department of Public Safety.

Finally, the SSMP would like to express its gratitude to the Hawaii State Legislature for passing legislation to support this project, along with the efforts and goals of the Corrections Population Management Commission (CPMC).

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EXECUTIVE SUMMARY

The Sentencing Simulation Model Project (SSMP) falls under the purview of the Corrections Population Management Commission (CPMC). One of the mandates of the CPMC is to ". . . recommend to the appropriate authorities, cost-effective mechanisms, legislation, and policies to prevent the inmate population from exceeding the limits established [by statute]" and that the recommendations should include estimates of fiscal impact. (Section 353F-3, Hawaii Revised Statutes) In order to accomplish these goals, the Commission established and oversees the Sentencing Simulation Model Project (SSMP). The goal of the SSMP is to produce forecasts of the prison, parole, and probation populations. This includes gathering, warehousing, and analyzing data from various criminal justice agencies in the state. The final products are two-fold: annual baseline projections, reported herein, and more detailed simulations of proposed changes to policies and practices.

The second year's baseline projections continue to show that past trends will generally flow in the same direction as in the past. This means that prison, parole, and probation populations will be typified by increased growth. The level of growth is expected to be similar in magnitude to the most recent five-year period. The trends and projections of particular note are that:

- The number of sentenced felons in the criminal justice system either under jurisdiction of prison or being supervised in the community while on probation or parole is projected to increase by 16.6% in the next five years (2004-08). This is up slightly from the 13.5% increase experienced in the previous five-year period (1999-2003).

- The prison population is expected to increase by 25.8% by 2006. This projected increase is higher than the population gain that occurred in the previous three years (15.4%). The previous ten years, from 1994-2003, saw the sentenced felon population grow 90.7%.

- Parole and probation populations will also continue to get larger. By 2008, the parole population is expected to increase by 42.1%, and the felony probation population is estimated to rise by 7.6%.

- Admissions to prison will be composed of increased proportions of parolees revoked and returned to prison and probationers revoked and re-sentenced to prison (i.e., those who already fall under the purview of correctional and community supervision agencies).

- There has been an increase in the past two years of convicted felons being sentenced to prison as opposed to probation. For 2003, the percentage of convicted felons being sentenced to prison rose to 29.7%, the highest rate since 1999 (29.5%).

INTRODUCTION:

SENTENCING SIMULATION MODEL PROJECT (SSMP)

SENTENCING SIMULATION MODEL PROJECT (SSMP)

2003 ANNUAL REPORT

PROJECT BACKGROUND

The Corrections Population Management Commission (CPMC) is charged with establishing maximum inmate population limits for each correctional facility and recommending cost-effective mechanisms, legislation, and policies to prevent those limits from being exceeded. Commission members represent the criminal justice system (law enforcement, prosecution, defense, courts, corrections, and parole) and policy makers from the legislature. Administratively attached to the Department of Public Safety, the CPMC is required to provide fiscal impact statements along with its policy recommendations (section 353F-3, Hawaii Revised Statutes). In order to aid the CPMC in its mission of delineating appropriate planning strategies, the Sentencing Simulation Model Project (SSMP) was created. Under the guidance of the Commission, the overall goal of the SSMP is to provide the Commission with a statewide statistical model inclusive of all aspects of the adult criminal justice system (e.g., prison, parole). The project is to act as a centralized statewide data repository for this information, accessing it for use in the model, and manipulating it within the simulation framework to project systemic changes brought about by revisions to current policies.

PROJECT GOALS & OBJECTIVES

A sentencing simulation model enables one to assess the impact of sentencing reforms on prison populations as well as correctional populations supervised in the community, most notably parole and probation. A model that is well-developed and properly maintained in terms of data compilation and interpretation has the capacity to project corrections populations upwards of five years into the future with relative accuracy.[1] Simulation models are becoming a standard tool across the nation for lawmakers and criminal justice practitioners in efforts to deal with burgeoning corrections populations in spite of financially-strapped legal systems and justice agencies. The State of Hawaii is also no stranger to this correctional resources quandary. Allocation decisions are best made with an intricate understanding of the "ebbs and flows" of the corrections system, a myriad of agencies that impact each other based on individualized policy and procedure. Changes to one area of the system will invariably affect all parts of the system, and often this "ripple" effect is unforeseeable in the near-term. Sentencing

[1] This assumes that policies and practices in place at the time the projection is made remain unchanged. As changes take place, the length of time that projections will be accurate diminish over time. Baseline projections are not able to take into account the changes that happen subsequent to the initial projections, though these changes will be incorporated into future projections. However, even if policies and practices change, these still will take time to impact the model's initial findings. For example, prison projections are unlikely to be severely impacted within a 3 year period, since many of these changes will take time to enact statistical differences. It is assumed that policy and practices will change from year to year, so that the relative accuracy of the first-year projections will lose varying levels of predictive power after 3 years.

simulation works to extrapolate and manage the intended and unintended consequences of policy changes in a statistical manner. With proper agency data input, the simulation model will be able to examine current policies while also being able to make projections based on proposed changes to existing policies.

The potential impact on correctional resources is an important consideration when significant changes in sentencing laws are proposed. Lawmakers duly request sponsors of sentencing legislation to provide a statement of impact, only to be advised that the technical ability is unavailable in the State (or that it would involve a preliminary study, often requiring unavailable resources and/or time). The accurate profile of existing convicted defendants and the development of tools to predict future criminal offender populations are essential to the efficient management of limited correctional resources. Current criminal offender information is fragmented statewide, compiled within two branches of government and three public agencies that supervise the criminal population. In addition, law enforcement agencies at the local- and state-level have additional information that is necessary to understand the flow of cases through the criminal justice system.

The SSMP seeks to gather all data necessary for use in the model. This entails compiling, substantiating, interpreting, and manipulating information submitted by all participating agencies, including: Department of Public Safety, Hawaii Paroling Authority, Adult Probation Division of the State Judiciary, and the Department of the Attorney General's Hawaii Criminal Justice Data Center. Also inclusive of the model are data pertaining to state population (Department of Business, Economic Development, and Tourism) and arrest statistics (Department of the Attorney General, Crime Prevention & Justice Assistance Division). This data is to be warehoused on a computer server dedicated to the SSMP. As the infrastructure of the system develops, agency data will be periodically uploaded to the SSMP data repository, with staff reporting data integrity issues and ensuring uniform data reporting directly to appropriate agency personnel and the Corrections Population Management Commission. Monthly system monitoring reports, consisting of corrections population trends, are to be submitted to the CPMC, along with annual reports. Also, simulation of current and future proposed legislation pertaining to corrections populations will be fielded and the findings reported, at the discretion of the Commission.

The ongoing and persistent attention to statewide corrections data, in both form and substance, ensures that the SSMP is providing accurate projections. A repository of this sort is necessary in understanding all effects produced by specific policy changes, and the results are able to convey explicit population fluctuations and fiscal impacts therein.

MAJOR ACCOMPLISHMENTS

Since the beginning of 2001, the Sentencing Simulation Model Project (SSMP) has been able to develop a working model, produce baseline reports, and continue addressing the structure and data necessary for ensuing micro-simulations. Some of the major accomplishments during this time include:

- Conduct several simulations of proposed sentencing changes in the following areas: three-strikes, repeat-violent offenders, ACT 161/crystal methamphetamine, and motor vehicle theft.

- Assist a committee formed to address Senate Concurrent Resolution 86 which was related to three-strikes legislation. A simulation was conducted on the proposal, which was geared toward repeat-violent offenders. Also performed was an examination of three-strikes legislation in other states.

- Develop the model for use in baseline and micro-simulations. The second year's baseline projections are reported herein. The first year's baseline figures have been compared to actual figures that occurred in the first projected year. The differences are reported herein. Adjustments in the model have been incorporated for the current year's baseline figures where appropriate.

- Form a statewide group composed of individuals who work directly with the state's criminal justice data and meet to discuss data issues on a periodic basis.

- Collect and warehouse all data necessary for the model. This includes hundreds of thousands of historical and current records from a number of different agencies, and essentially linking them together.

- Construct and implement a new data program for the Hawaii Paroling Authority (HPA). HPA's past data program was unable to capture data in a way that would be of any use for large-scale statistical analyses. The Project built a new program that would collect data in a more efficient manner, and also assist staff on an operational level (e.g., reports).

- Conduct and assist in audits of agency data. Considerable effort was expended to assist the separate agencies in the improvement of their data, whether it be in terms of collection, enumeration, or production. The Project was a key player in the examination of data from the Department of Public Safety and Hawaii Paroling Authority, providing detailed assessment of problems, methods for addressing these, and providing assistance in cases where the data were corrected.

The Project's goals would not have been completed had it not been for the support of agency staff from the Department of Public Safety, Hawaii Paroling Authority, Department of the Attorney General, Adult Probation Division, and The Judiciary. In addition, without federal and legislative support of the project, many of these items would not likely have been completed, much less fulfilled in a timely manner.

PROJECT PROGRESS & ACTIVITIES

The project has identified the data elements required for the model, and secured the cooperation of all agencies in retrieval of this data, current and future. The data has been extracted from all necessary sources to-date, and converted to useable form for the simulation model. Many of the ensuing activities have been primarily geared toward increasing data integrity along with developing the model using the best available data, or manipulating the retrieved data in a manner that is useable for the simulation model.

With the development of the model and the data to support it, the project has conducted several simulations. These have included sentencing proposals related to three-strikes, motor vehicle theft, and repeat-violent offenders.

The SSMP has continued previous efforts to assist the various agencies in terms of their data. The new data management systems recently put into use by PSD and HPA show significant improvement in data quality and the Project's ability to do research on them in the future without the need to heavily sample data or limit projections. So, as time passes, the need for the SSMP to bridge problematic data will dissipate. This will help in the creation of more accurate projections, based on statistics that are not limited by the inherent error caused by sampling or other data techniques used to acquire them.

In the ending months of 2001, SSMP staff constructed a new database program for the Hawaii Paroling Authority (HPA), effectively replacing the old system. The new database was developed in order to make HPA's database functional in terms of research. While helping HPA's operational data needs, the ultimate goal for SSMP is to have the database be able to capture data necessary for the model (which was previously impossible with the program as it was implemented at the time). The project is currently reconciling data in HPA's new system with those data reported by PSD, most notably the release to parole reported by each agency.

In order to ensure proper data interpretation and accurate population trends reporting to the CPMC, the project has formed a working group composed of personnel from the participating agencies who work directly with agency-specific data and management information systems. This group is seen as a necessary link between personnel working with data across agencies, allowing the formation of a more unified correctional data set, the crux of the SSMP's data to be used in simulations and projections. This working group is coined the "CPMC Data Management Group (DMG)" and meets semi-annually, but may meet more frequently if deemed appropriate. Present at the meetings have been representatives from the Department of Public Safety, Hawaii Paroling Authority, Department of the Attorney General, and SSMP staff.

PROBLEMS ENCOUNTERED

The problems encountered by the SSMP have generally been focused on the acquisition of quality data from PSD and HPA and making this data conform to the simulation model's requirements. Whether it was incomplete, erroneous, or unable to be gathered electronically, data problems were of the utmost concern. In order to address these problems, the SSMP has worked extensively with each agency to assist them in correcting these problems.

Each participating agency has its own methods of capturing data. Given the scope and magnitude of the project, the simulation model must rely on electronic data submitted by each, as case records within each agency often number in the tens of thousands. Historical data pertinent to the model have been collected, but discovery of problems related to data integrity and completeness have arisen. The links with the Department of Public Safety (PSD) and Hawaii Paroling Authority (HPA) data have posed the most difficulties. PSD has recently changed over to a new corrections management information system (CMIS). In the process of developing the model and performing simulations, the project has been able to identify problematic data.

PSD's data problems are multi-faceted, with many of these problems associated with the "newness" of the computer system, and the switchover from systems in the past. Several changes in management information systems over the past decade have caused historical data to be lost, lacking in research capabilities, erroneous, or incompatible with current data and/or collection methods. Many of these problems are inherent to the process of data migration. The project is currently reconciling data reported in PSD that is also reported elsewhere (e.g., CJIS, HPA, APD). Once these linkages and conceptualization of data and terms are reconciled, data should be more interchangeable for modeling and audit purposes.

The most recurring obstacle to the project has been the integrity of electronic data from various agencies. As agency computer systems mature, the data is expected to become more accurate and complete, and this shows to be the case in most recent data examinations. Once these data are fully reliable, it is easier to reconcile differences among agencies and to assess common ground for the conceptualization of "transaction counting" present in the systems to "flow analysis" of offenders, as used and required in the simulation model.

In terms of the data produced by the project, it was discovered that priors were previously tallied by the project using an incorrect methodology. This was corrected in the database by adjusting the data query language.

CORRECTIONS POPULATIONS

TRENDS & PROJECTIONS (1994-2008)
STATE OF HAWAII

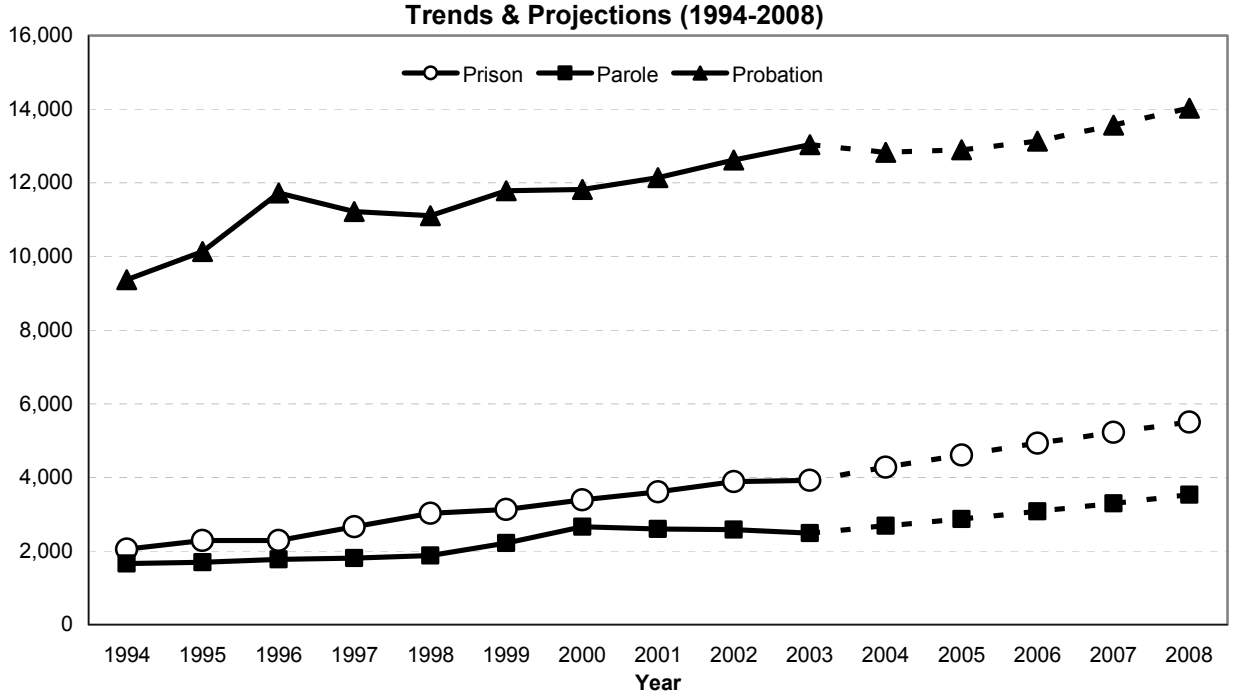
CAVEATS

A simulation model is based upon various statistical techniques and methods used to achieve projections. This includes the application of sound and reasonable assumptions. This precludes simulations as being an "exact" science, but they provide realistic estimates of figures and trends that are grounded in historical and current data, and the knowledge-base of those directly implementing current policies and practices, along with those working directly with the data. While baseline projections will rarely be perfect and exact, they do provide a foundation of what is reasonably to be expected in future years, allowing that major policy shifts or trends do not occur. The projections reported here are carried out for a five-year term. It is highly likely that within these five years, policies will change and trends will increase or decrease. These changes will be worked into future projection models, but many of these cannot be predicted at this point in time.

The projections presented here assume that policies and practices in place at the time the projection is made will remain unchanged. As changes take place, the length of time that projections will be accurate diminish over time. Baseline projections are not able to take into account the changes that happen subsequent to the initial projections. However, even if policies and practices change, these still will take time to impact the model's initial findings. For example, prison projections are unlikely to be severely impacted within a 3 year period, since many of these changes will take time to enact statistical differences. It is assumed that policy and practices will change from year to year, so that the relative accuracy of the first-year projections will lose varying levels of predictive power after 3 years.

The State of Hawaii's correctional and community supervision populations have consistently increased over the past decade. The number of felons sentenced to prison or probation and serving the remainder of their term on parole, has increased 48.5% over the past 10 years, up from 13,086 in 1993 to 19,784 in 2003 (see chart below). The rate of overall growth has slowed in the past few years, showing smaller percentage increases on a yearly basis. The overall sentenced felon population in prison, on parole, or on probation is projected to increase 18.6% in the upcoming 5-year period; this figure is a continuation of the most recent slowed-growth trends, though up slightly from the previous 5-year timeframe which was witness to a 13.5% increase.

Chart 1-1. Sentenced Felons: Prison, Parole, & Probation Populations Trends & Projections (1994-2008)



The following definitions are supplied in order to clarify their meaning as used in the projection model and how they should be interpreted in this report:

Sentenced Felon: an offender who has been sentenced by the courts to a prison term (1 year or more) or to a probation sentence (5 years or more). The current simulation model is focused only on sentenced felons. This means that the jail population is not figured into the historical trends nor the projected figures.

Prison: includes offenders incarcerated and sentenced for felony offenses directly from the courts, sentenced felons who had been released on parole from prison and then revoked and returned to prison, or probationers who have been revoked and re-sentenced to prison.

Probation: includes only felony probationers, and does not include misdemeanants.

Parole: includes felons released from prison to serve out the remainder of their sentence under the supervision of the Hawaii Paroling Authority.

The prison population has increased significantly over the past decade, up 90.7% since 1994.[2] The increases have been relatively steady during that timeframe, though the rate of growth has generally begun to slow down over the past few years; last year's net growth was the smallest increase since 1996. The projections of the prison population indicate that the past trends will continue in the same direction and that the magnitude of change will continue to become smaller over time. In other words, the prison population is projected to experience continued growth, but at a slower pace than in the past. The trend downward in the percent change of the population from one year to the next will be maintained (i.e., population increases from year-to-year have been becoming smaller over time in relationship to the overall prison population).

By the end of 2005, the population is projected to be 4,610 sentenced felons and parole revokees, an increase of 694 from the current 2003 figure of 3,916; and within five years, this is expected to reach 5,499. This reflects an estimated 40.4% increase in the population over the next five years, an increase over what has occurred in the previous five-year period (29.5.%). The net population growth is anticipated to decline on a yearly basis, meaning that year-to-year percentage changes in prison population are expected to drop in a similar fashion, beginning in year 2004-2005 (a 0.0% change from one year to the next would indicate that there was zero population growth).

Admissions to prison via probation and parole, in terms of re-sentenced to prison and revocations respectively, are projected to increase 40.2% during this period, from 622 in 2003 to 872 in 2008. Meanwhile, offenders sentenced directly from the courts, are projected to increase by 17.0% during this timeframe, from 914 to 1,070. In other words, it is projected that there will be an increase in the rate of prison admissions for felons currently in the criminal justice system, either on parole or under a sentence of probation, than for offenders sentenced directly from the court to prison. In 2003, 40.5% of prison admissions were offenders already under the supervision of the criminal justice system, either having their parole revoked or their probation term violated and being re-sentenced to prison. This proportion was a slight drop from the previous two years. By 2008, the proportion of prison admissions that are either parole revocations or probation violators re-sentenced to prison is projected to be 44.9% of admissions in 2008.

The five-year projections for the prison population are accomplished using the current practices and trends across the criminal justice system in order to delineate future population figures, including projected arrests and convictions, sentences to prison, probation and parole revocations, releases to parole, and sentence completions.

[2] These figures are for the "assigned count" of the prison population which is "[the] number of inmates under the jurisdiction of a Hawaii correctional facility on a specific date. It includes both inmates who were physically housed in the facility; and inmates who were placed on furlough, in a medical facility, or incarcerated in an out-of-state facility."

Chart 2-1. Prison Population (Assigned Count)[1]
Trends & Projections (1994-2008)

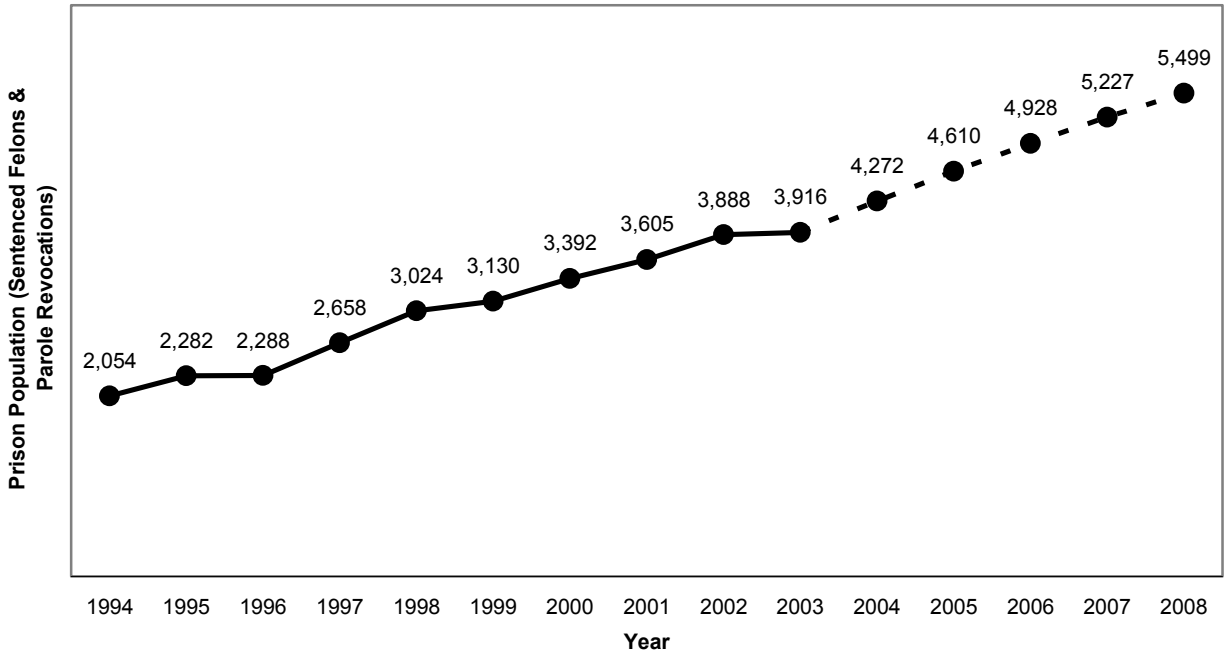
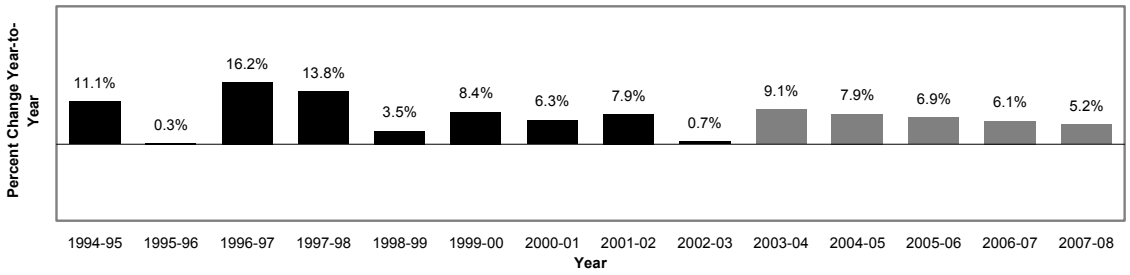


Chart 2-2. Percent Change Year-to-Year
Trends & Projections (1994-2008)



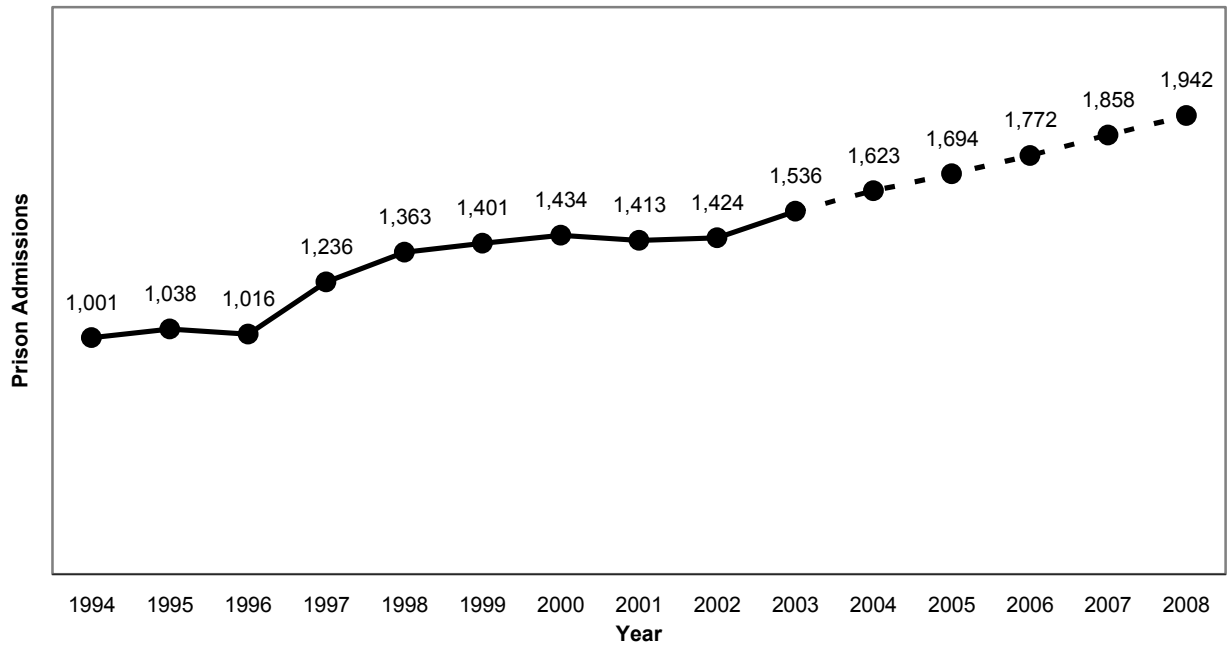
Trends from 1994-2003:

- Large growth from 1994-1999, attributable to higher rates of felony convictions, sentences to prison, and increases in parole revocations and probation revocations re-sentenced to prison. Rates of felony convictions pitch to new levels beginning in 1998.
- Moderate growth from 2000-2003, as felony conviction rate slightly declines and levels off, from a high of 26.5% in 1999 to 25.4% in 2003, ; the number of convictions sentenced to prison decreased from 918 to 786 in 1999-2002, but increased to 914 in 2003 .

Projections for 2004-2008:

- *Prison population to increase by 19.7% in the next 3 years, and 29.3% after 5 years. The percentage change year-to-year will continue to decline beginning in 2004-2005, an indication that the population base is getting larger, but also shows that raw numbers of inmates are remaining at the same level or less as years previous.*
- *What the 2002 model projected for 2003: 4,172*

Chart 3-1. Total Prison Admissions
Trends & Projections (1994-2008)



Trends from 1994-2003:

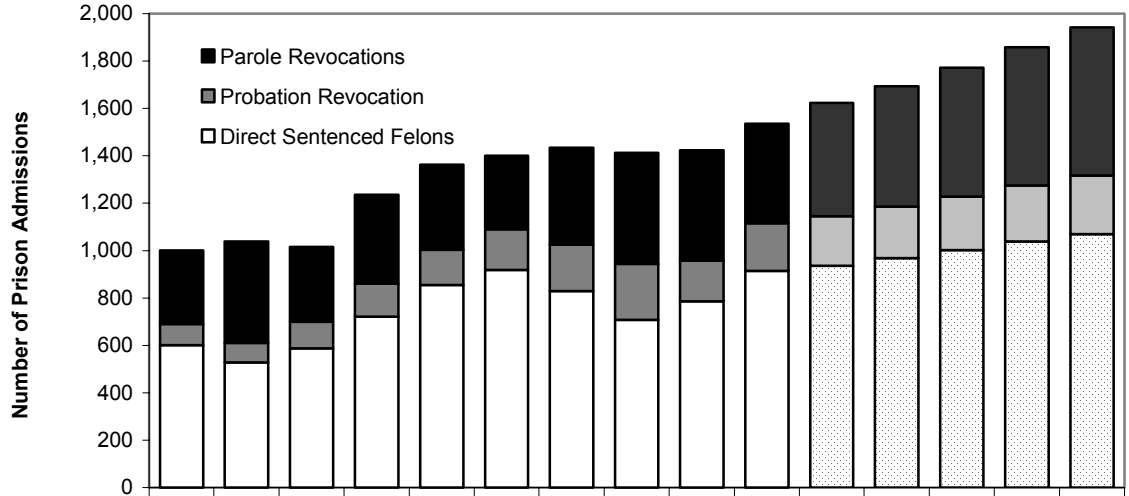
- There was a jump in admissions in 1997 and 1998 due to an increase in felony offenders sentenced directly from the courts, and conviction rates and sentences to prison increased.
- Slowed admissions beginning in 1998-1999 as felony offenders sentenced directly from the courts decrease; however, more pressure then from parole revocations and probation revocations re-sentenced to prison.
- The year 2000-2001 showed the first decrease in admissions in 4 years, though there was a small increase in the following year 2001-2002, and a more noticeable increase this past year.

Projections for 2004-2008:

- *Smaller but steady increases in admissions are expected in 2004-2008.*
- *Increased proportion of admissions of parole revocations and probation revocations re-sentenced to prison.*[3]
- *What the 2002 model projected for 2003: 1,478*

[3] This reflects the model's assumptions of arrests and sentencing and convictions patterns to remain at levels that are currently in place. This is based on gradual increases in the population that has been statistically found to be most highly correlated to arrest for the offenses that are included in the model.

Chart 4-1. Admissions to Prison by Type
Trends & Projections (1994-2008)



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Parole Revocations	311	427	316	376	359	311	409	469	467	420	478	508	544	583	625
Probation Revocation	89	83	112	139	149	172	196	237	171	202	210	217	226	237	247
Direct Sentenced Felons	601	528	588	721	855	918	829	707	786	914	935	968	1,002	1,038	1,070

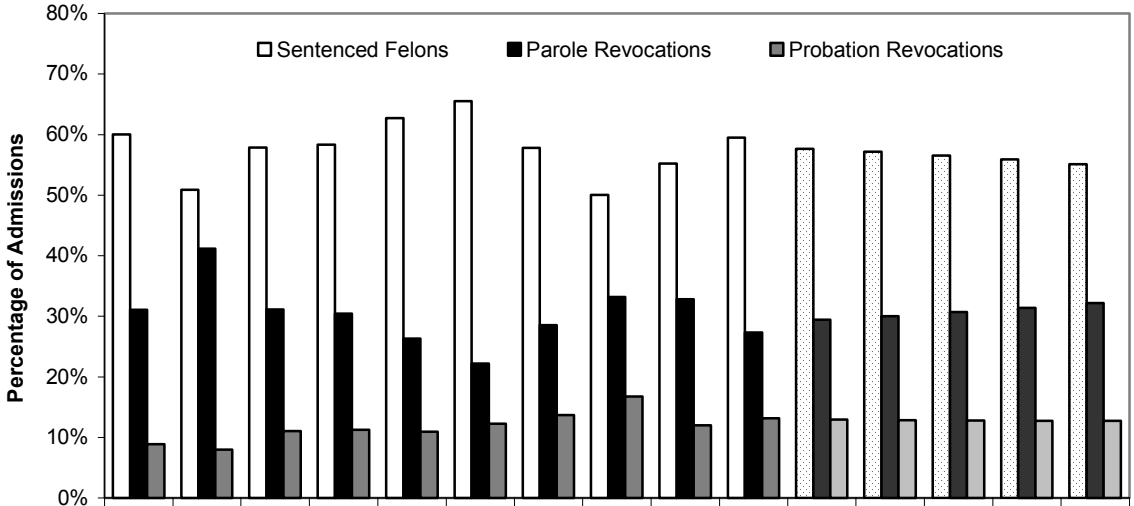
Year / Actual Figures

Trends from 1994-2003:

- The driving force behind prison admissions through 2000 has been felony offenders who have been directly sentenced from the courts. This trend peaked in 1999, decreased the next two years, and then increased last year. Two of the past three years have shown an increased proportion of prison admissions attributable to felony offenders directly sentenced to prison by the court. It is still the majority of admission types and is projected to be so through the year 2007, but, given current practices and policies, arrest projections, and sentencing and conviction trends, this is expected to decrease, thus approaching the numbers of felons admitted to prison as a result of a parole revocation or a probation revocation re-sentenced to prison.

- Increases in the proportion of admissions that are felons either under the supervision of parole or probation decreased this past year, but is expected to increase in the next 5 years. Percentage increases in probation revocations re-sentenced to prison increased in 4 of the last 5 years, though parole revocations returned to prison decreased the last two years.

Chart 5-1. Proportion of Prison Admissions by Type
Trends & Projections (1994-2008)



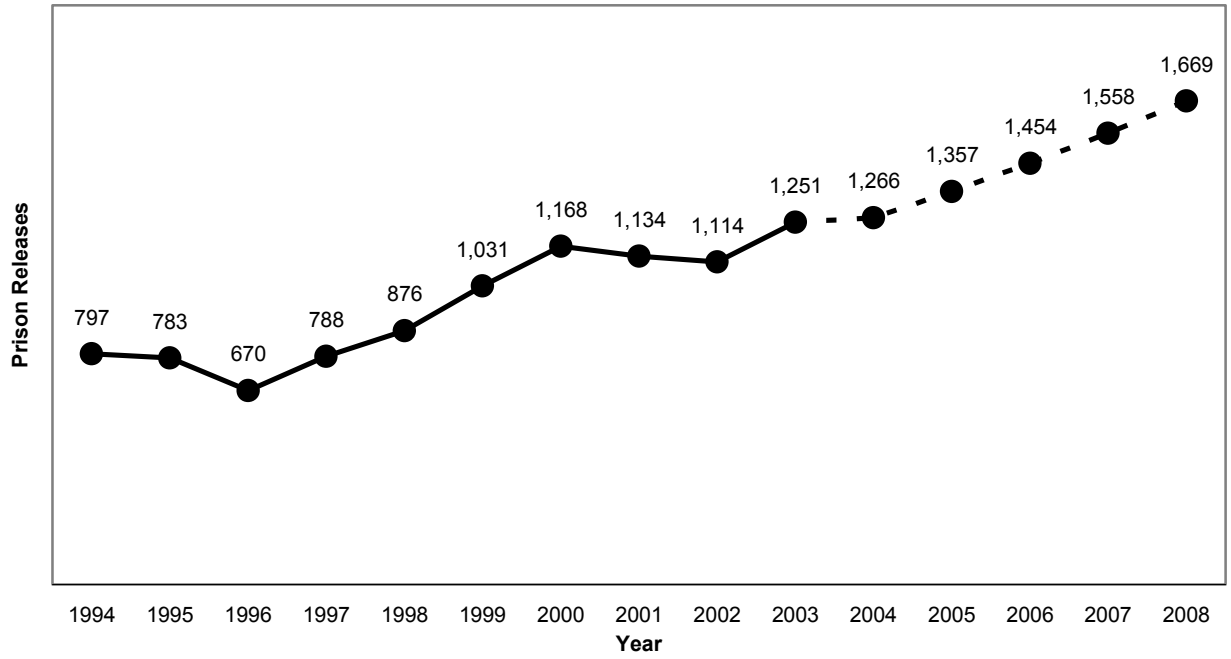
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Sentenced Felons	60.0%	50.9%	57.9%	58.3%	62.7%	65.5%	57.8%	50.0%	55.2%	59.5%	57.6%	57.2%	56.5%	55.9%	55.1%
Parole Revocations	31.1%	41.1%	31.1%	30.4%	26.3%	22.2%	28.5%	33.2%	32.8%	27.3%	29.4%	30.0%	30.7%	31.4%	32.2%
Probation Revocations	8.9%	8.0%	11.0%	11.2%	10.9%	12.3%	13.7%	16.8%	12.0%	13.2%	12.9%	12.8%	12.8%	12.7%	12.7%

Year / Actual Figures

Projections for 2004-2008:

- *Projected felony offenders directly sentenced by the courts and probation revocations re-sentenced to prison are expected to decrease slightly during the upcoming years; parole revocations returned to prison is expected to slightly increase during this timeframe.*
- *The relationship between prison admissions and felony offenders directly sentenced to prison from the courts warrants continued monitoring, and possibly a re-examination of current policies and practices in place or assumptions made in the model. Last year's proportions showed more admissions being attributable to direct sentenced felons than initially projected; this is mainly tied to an increase in direct sentenced felons and a decrease in parole revocations. This is also dependent on the number of arrests and assumptions in regards to sentencing and conviction to prison that are maintained in the model; the model uses the most recent trends as benchmarks on future rates in these instances.*

Chart 6-1. Total Prison Releases
Trends & Projections (1994-2008)



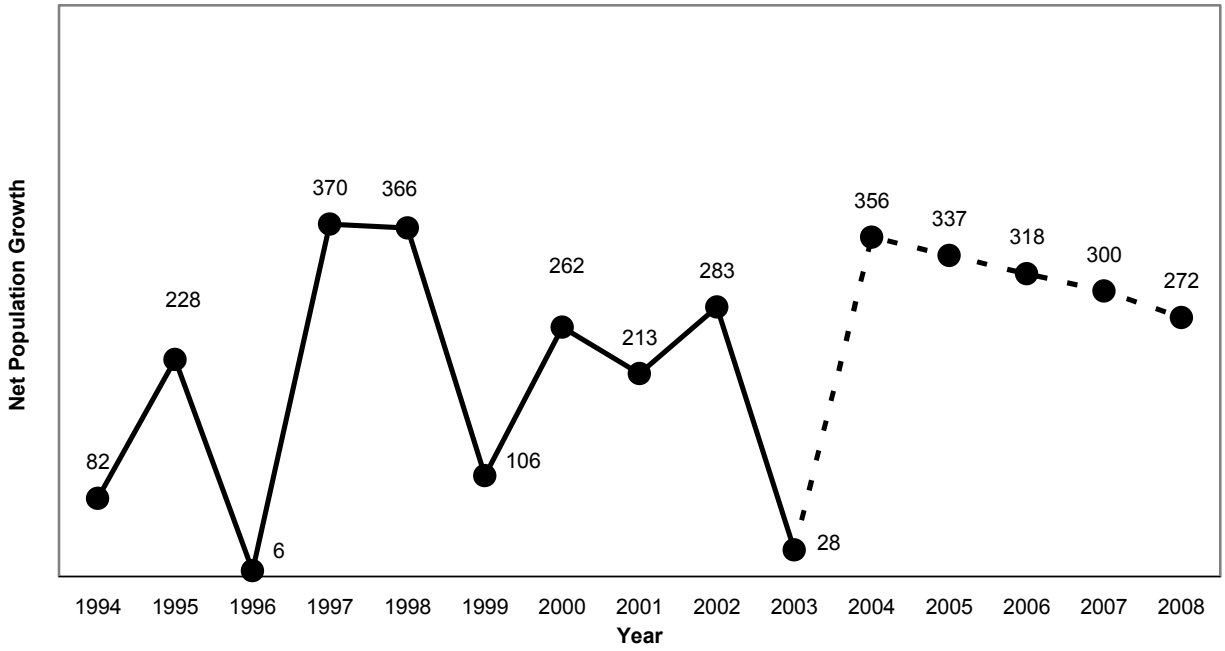
Trends from 1994-2003:

- There was a decline in prison releases from 1994-1996, with the biggest drop in 1996; this was due in part to a low parole approval rate in that year (26.9%), which was about half the rate of approvals of years prior (ranging between 51.9% and 58.0%). Despite a much larger amount of parole considerations in 1996 (2,082), which amounted to about 70% more than the previous two years, it was still unable to overcome the particularly low approval rate, and releases actually continued to decrease. Another large cohort of releases to parole were considered the following year in 1997 (1,938), but the rate of approval, despite still being low historically for the period covered (33.9%), resulted in a swing upward (in a direction that then continued through 2000).
- From 1996-2000, there were steady increases in prison releases. This was due to a combination of increases in sentence completions for a couple of the years, and an increasing parole approval rate (which began to approximate the same rate seen in the 1993-1995 period. The parole approval rate has remained steady the past two years at 55%.
- Last year showed an increase in the number of prison releases, the first increase in two years.

Projections for 2004-2008:

- *As more prisoners continue to become eligible for parole, as long as the current parole approval rate is maintained at the current level and projected admissions continue to increase, it is expected that releases will then begin to show slight increases on a yearly basis in the upcoming 5-year period.*
- *What the 2002 model projected for 2003: 1,194*

Chart 7-1. Net Prison Population Growth Trends & Projections (1994-2008)



Trends from 1994-2003:

- There was a sizeable overall increase in net prison population growth between 1995 and 1998. Since the population base was notably smaller during this time, the extent of net population growth is more pronounced (i.e., as a proportion of the total population). There was considerable net population growth reported in 1997 and 1998. This was due to an influx of prison admissions during this time without corresponding releases to offset the large net growth.
- From 1999 to 2002, net population growth was steady, though more moderate (especially now considering that the total population base was now higher).
- Last year experienced the lowest net population growth since 1996.

Projections for 2004-2008:

- *Net population growth for the next few years is expected to increase from the low experienced in 2003, and more closely approximating the base seen over the past four years as a whole. A continued downward trend is expected in 2005-2008 as the rate of releases from prison increase slightly more than prison admissions.*
- *What the 2002 model projected for 2003: 284*

The parole population under supervision has also increased significantly over the past decade, up 49.3% since 1994. The two-year period 1998-2000 accounts for a substantial amount of this increase, a rise of 41.5% during this time. The parole population has increased every year since 1993, but has decreased in each of the past three years (-2.4%, -0.5%, and -3.8%, respectively).

The projections of the parole population under supervision indicate that the overall past trend during the past decade will continue, with steady increases in the next five years. However, the past three year trends warrant future consideration. An increase in the number of early discharges has impacted the most recent projection figures. This trend has been accounted for in this year's projections, and needs to be monitored closely to ensure that future projections remain accurate. Overall, it is predicted that the parole population will increase by 42.1% in the period 2004-2008. Again, this is assuming current policies and practices in place continue throughout this timeframe. If increases in early discharges occur at a rate up and beyond what is projected, the overall projections of population under supervision will need to be adjusted downward.

The number of prisoners eligible for parole is predicted to increase between 2004 and 2008. Following suit, the amount of prisoners considered for parole is expected to steadily increase in the upcoming five years, approaching its highest level since 1996 beginning in 2005. The parole approval rate ranged between 53.9% and 58.1% from 1999-2002; last year saw an increase in the rate to 66.6%. This was mainly due to there being fewer considerations during the year, as the actual number of prisoners released to parole only slightly increased. For purposes of the projection, the model has built in the assumption that the approval rate will fall in between last year's and the years previous (60%). If this rate fluctuates widely, then the parole population would be affected in the like direction, assuming other variables remain constant, such as rates of revocation and discharge (i.e., if the parole approval rate increases, then the population under supervision will increase; if parole approval decreases, then the population under supervision will decrease). This, in turn, would impact the prison population, though in an inverse fashion (e.g., if the parole approval rate decreases, the prison population will increase, etc.). If the other variables held constant in this example, the *direction* of change would follow suit as mentioned; however, this does not make allusions to the *amount or magnitude* of change. To estimate the impact of such an event would require a separate simulation model for comparison purposes.

As mentioned previously, predictions of fluctuations as portrayed in the example above are difficult to anticipate; fluctuations or disparate changes from current practices often produce 'in concert' mechanisms and impacts. That is, a large swing in "parole approval rate" will likely be accompanied by potentially offsetting patterns in another variable or set of other variables (e.g., revocation rate and discharges).

The parole approval rate plays a part in fluctuations of the prison population. As an example, in 1996 despite the highest number of parole considerations ever to-date,

there was a sizeable decrease in the number of prison releases, due in part to the lowest parole approval rate in the past 10 years (26.9%). The parole approval rate significantly increased over the next four years (from the low of 26.9%in 1996 to a high of 58.1% in 2000), and releases from prison increased by 74.3%. Remember though that during this time, in spite of increases in releases to previous levels, the prison population continued to grow by 48.3%.

Parole revocations are projected to increase in the next five years, as a function of the increased population under supervision. Using the 1999 study by the Crime Prevention & Justice Assistance Division, Department of the Attorney General, as a benchmark for projecting revocation rates, the number of revocations is expected to increase to 625 by 2008, up from 420 reported in 2003. This amounts to a 48.8% increase in the number of parole revocations during this period.

Chart 8-1. Parole Population Under Supervision
Trends & Projections (1994-2008)

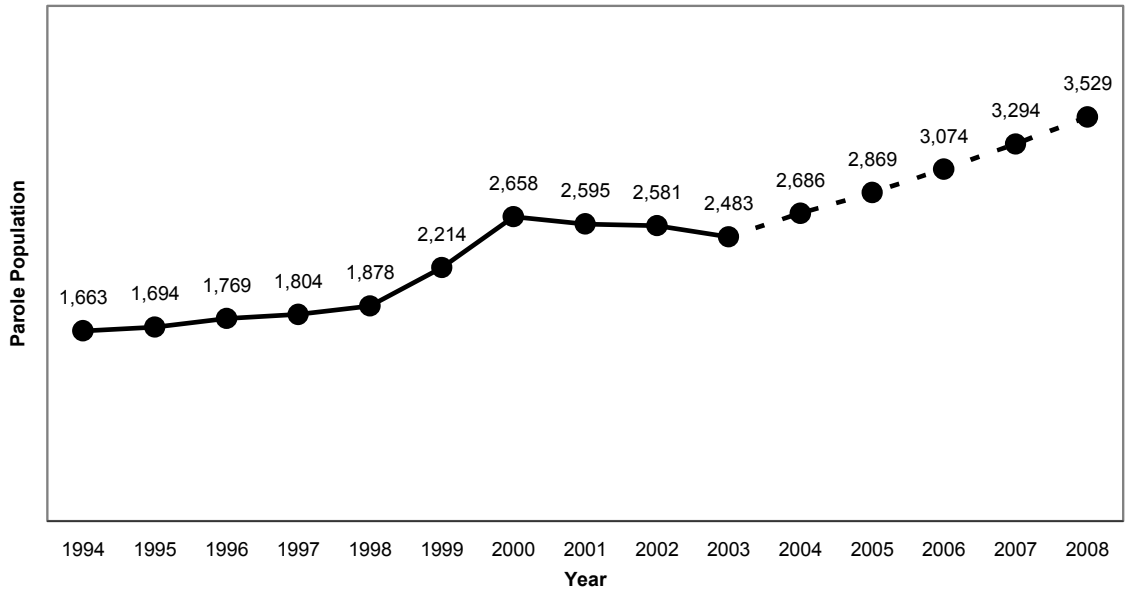
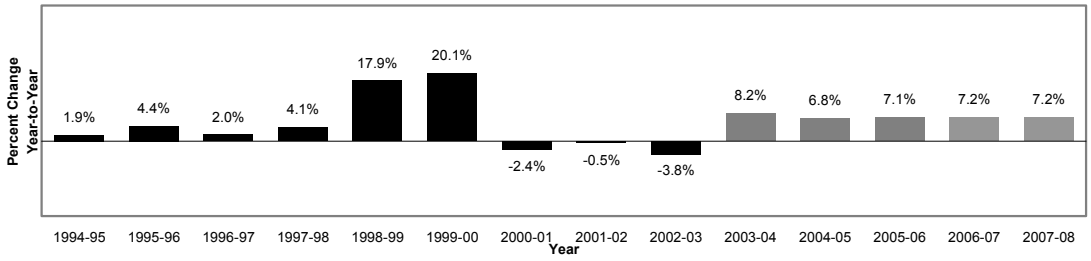


Chart 8-2. Percent Change Year-to-Year
Trends & Projections (1994-2008)



Trends from 1994-2003:

- The parole population rose every year between 1993 and 2000, an increase of 59.8% during that time, much of this attributable to a 41.5% increase between 1998 and 2000. Overall, during 1994-2003, a gain of 49.3% resulted. The past three years have shown a slight decrease in the parole population under supervision.

Projections for 2004-2008:

- *It is projected that the parole population will increase, gaining 42.1% during this period. If early discharges continue to increase, this rate will decrease accordingly. This will need to be monitored closely in the future in order to improve accuracy.*
- *The parole approval rate, if remaining at current levels, supports the expected growth pattern as releases from prison to parole will continue to increase. The projection uses the most current level as a constant when projecting releases from parole (discharges, revocations, etc.). If the average length of stay for a parolee continues to aggressively drop like it has in the past two years, this will impact the parole population projections in the same direction (i.e., a decrease in the average length of stay will result in a decrease in the parole population).*
- *What the 2002 model projected for 2003: 2,871*

Chart 9-1. Parole Revocations, Returned to Prison
Trends & Projections (1994-2008)

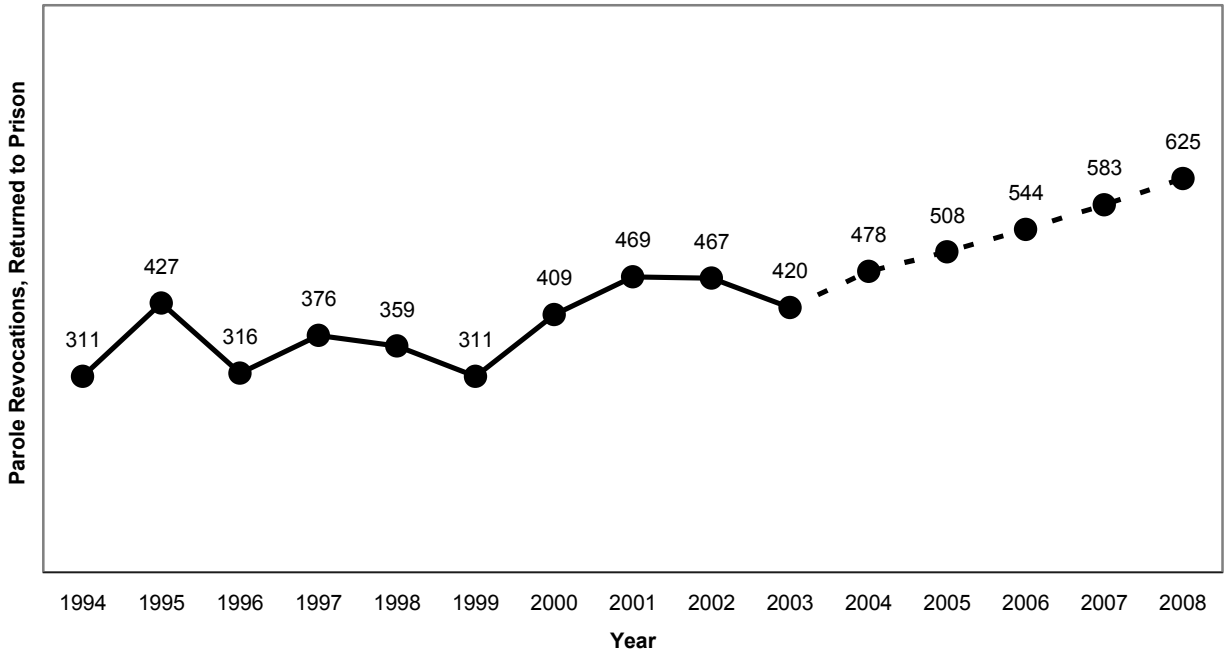
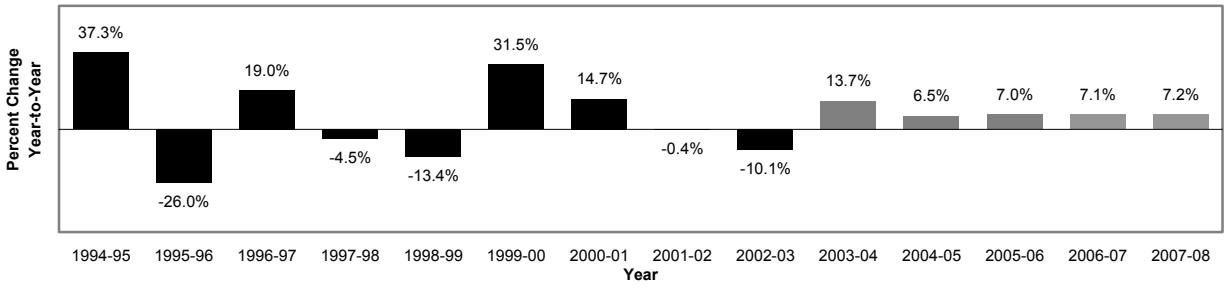


Chart 9-2. Percent Change Year-to-Year
Trends & Projections (1994-2008)



Trends from 1994-2003:

- Parole revocations have increased by 35.0% during this period. A spike upward was experienced in 1994-1995, but the following years dropped down to more normalized growth rates. Significant increase ensued in 1999 and 2000, remained level in 2002, and decreased in 2003.

Projections for 2004-2008:

- *Parole revocations are expected to increase during this period by 48.8%. Last reported in 2003, this figure was 420; this is projected to reach 625 by the year 2008.*[4]
- *What the 2002 model projected for 2003: 494*

[4] The benchmark used for projecting parole revocations is based on the failure rates reported in the 1999 study, "Survival on Parole" (Crime Prevention & Justice Assistance Division, Department of the Attorney General). See references for full citation.

Chart 10-1. Parole Considerations
Trends & Projections (1994-2008)

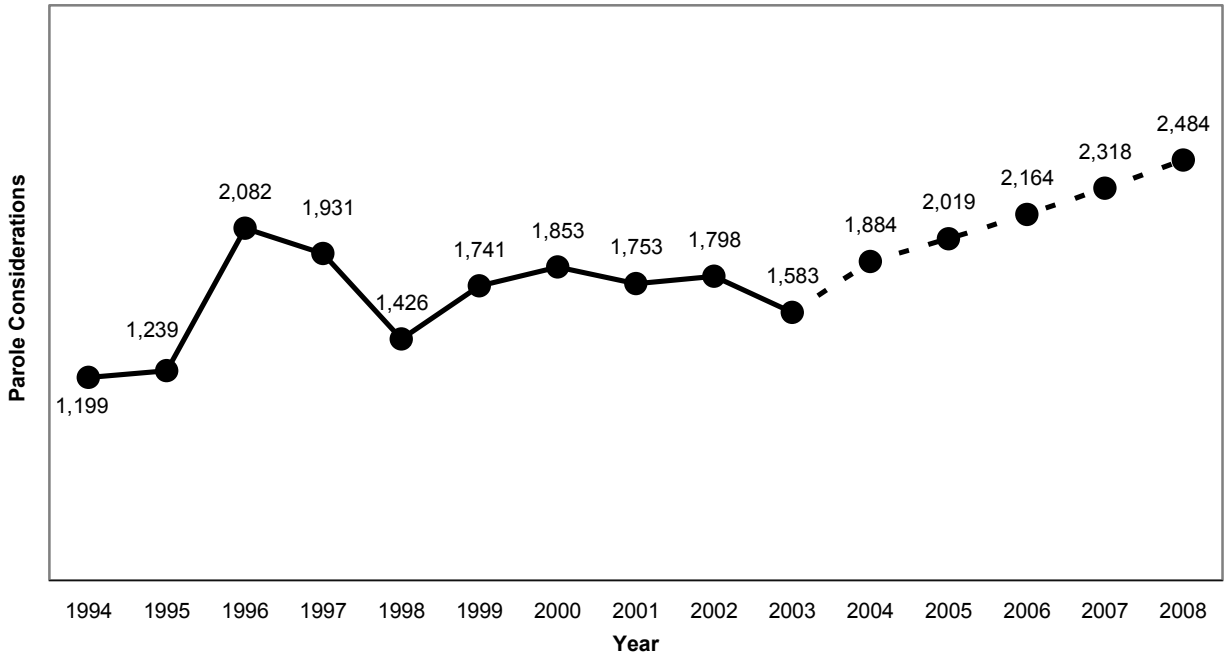
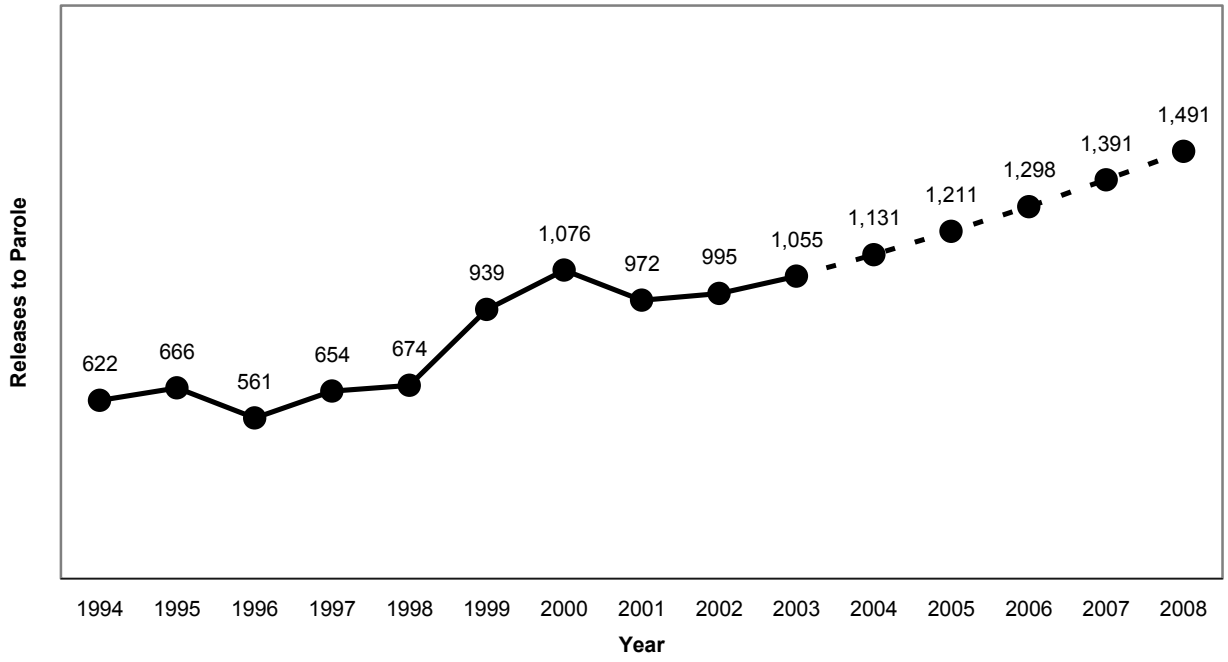


Chart 11-1. Prison Releases to Parole
Trends & Projections (1994-2008)



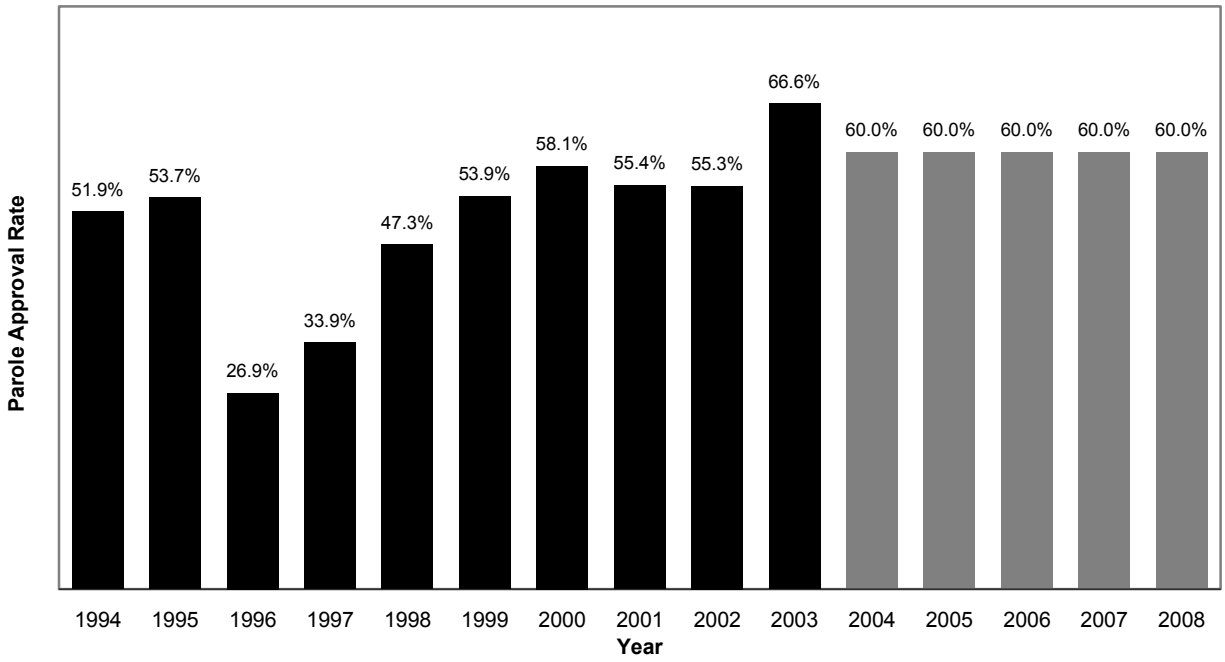
Trends from 1994-2003:

- Parole considerations have increased by 32.0% during this period, from 1,199 in 1994 to 1,583 in 2003. A sizeable increase in considerations was seen in 1996 and 1997; however, the releases during these two years actually dipped below previous years because of low parole approval rates.
- Since 1999, prison releases to parole have increased 12.3%, from 939 in 1998 to 1,055 in 2003. This is a combination of continued numbers of prisoners becoming eligible for parole coupled with an increase in the parole approval rate.
- Last year's number of parole considerations was significantly less than the previous four years. It is expected that the number of considerations will increase from the most recent year's figure, and will increase yearly.

Projections for 2004-2008:

- *Parole considerations are expected to increase by 56.9% in the next five years. By 2005, this figure is expected to eclipse the 2,000 mark (a level not previously seen since a height of 2,082 in 1996). At the end of the 5-year projection, the number of parole considerations is expected to be 2,484.*
- *Releases from prison to parole are projected to continue increasing. This figure is estimated to increase by 41.3%, from 1,055 in the last reported year to 1,491 at the end of the projection time period. If parole approval rate fluctuates significantly, the projected number of prison releases to parole and the parole population under supervision will be impacted. A substantial decrease in the parole approval rate would result in slowed growth in the parole population, and this would contribute to a decrease in the rate of prisoners released from prison, and would have the effect of increasing the growth rate of the prison population. Conversely, if the parole approval rate increases, as long as parole considerations continue in the current and projected growth pattern, this would increase the rate of growth of the parole population under supervision, and would increase the rate increase of prison releases, thus decreasing the growth rate of the prison population.*
- *What the 2002 model projected for 2003 Parole Considerations: 1,939*
- *What the 2002 model projected for 2003 Prison Releases to Parole: 1,066*

Chart 12-1. Parole Approval Rate Trends & Projections (1994-2008)



Trends from 1994-2003:

- The parole approval rate has seen some significant fluctuation in the past ten years. Given the past four years, the assumed rate used in these projections is 60.0%. The parole approval rate dipped significantly in 1996 and 1997, though releases to parole declined only modestly due to an exorbitant number of considerations in those two years.
- After the unprecedented drop in the parole approval rate in 1996, the rate increased in each of the following four years, until reaching a high of 58.1% in 2000. In 2001 and 2002, the parole approval rate has dropped slightly from 2000, but has been near-identical during the past two years at 55.4% and 55.3%, respectively. Last year's rate of 66.6% is the highest in the past ten-year period. It is assumed that this rate will drop in the future, resembling more the patterns displayed in the past four years overall.

Projections for 2004-2008:

- *The parole approval rate, for purposes of the projections, is assumed to continue at 60% a rate in between the past two years. Since this is a rate, and highly dependent on the members of the parole board, it is a figure that cannot be projected using the same bases as other estimates; it is an assumption that is built into the model.*
- *What the 2002 model used as the assumed rate for 2003-2007: 55.0%*

The felony probation population under supervision has increased by 3,670 in the past decade, or 39.2%. The rate of increase has not been as high as prison or parole populations, due in part to a generally decreasing percentage of sentences to probation as opposed to prison; also, during this time, police arrests have decreased by -11.2%.[5]

From 1994-1996, the felony probation population under supervision increased by 25.1%. After this period of large growth, the increases have shown consistent increases but at more moderate levels. From 1996, the population has increased 11.2%, from 11,722 felony probationers to 13,039 reported in 2003. It is expected that the population will increase by 992 felony probationers by 2008, an increase of 7.6% during in the next five years.

The number of felony probation sentences (placements) has increased 24.5% in the past decade, from 1,739 in 1994 up to 2,165 in 2003. It is expected that new felony probation sentences will continue to increase in a pattern similar to the past trends, up 15.3% in the next 5 years, and by 2008 will be near 2,500.

The number of placements is based on projected arrests and assumptions about future sentencing and conviction trends. As the population most highly correlated with arrest is projected to grow, it is the built-in assumption that arrests will increase. As arrests increase during this projected period, sentences to prison and probation will also increase. The ratio of probation-prison has remained relatively stable over the past five years, roughly ranging between 70-73% of the felony convictions. This is a trend downward from the previous five-year period. Given that the rate remains in this area (70% used in the model, and outlined in the next section of this report), this will result in the projected increases in the felony probation population under supervision.

Probation revokees that are re-sentenced to prison are expected to continue increasing during the projected period (2004-2008).[6]

[5] The current and historical arrests tabulated by the SSMP are not inclusive of all offenses. It includes 22 offense types which account for roughly 25-30% of all arrests on any given year. The model has selected these offense types out, at the suggestion of Dr. Pablo Martinez, as these have been shown to be most indicative of trends and patterns in the criminal justice system in response to the arrest and the carrying out of sanctions.

[6] For simulation model purposes, in order to maintain the integrity of the data linkage between prison admissions and probation revocations, data in reference to probation revocations and prison admissions is taken from data collected through the Department of Public Safety (PSD). These numbers are different from the revocations reported by the Adult Probation Division, but this difference is more a result of a conceptual difference as opposed to a counting difference. What the model needs to capture for projections are the numbers of felony probationers who are revoked and re-sentenced to prison; PSD's figures of probation revocations that are re-sentenced to prison best capture this element necessary for properly tracking the flow of probationers in relationship to prison, and maintaining the integrity of the linkage historically.

Chart 13-1. Felony Probation Supervision Caseload Trends & Projections (1994-2008)

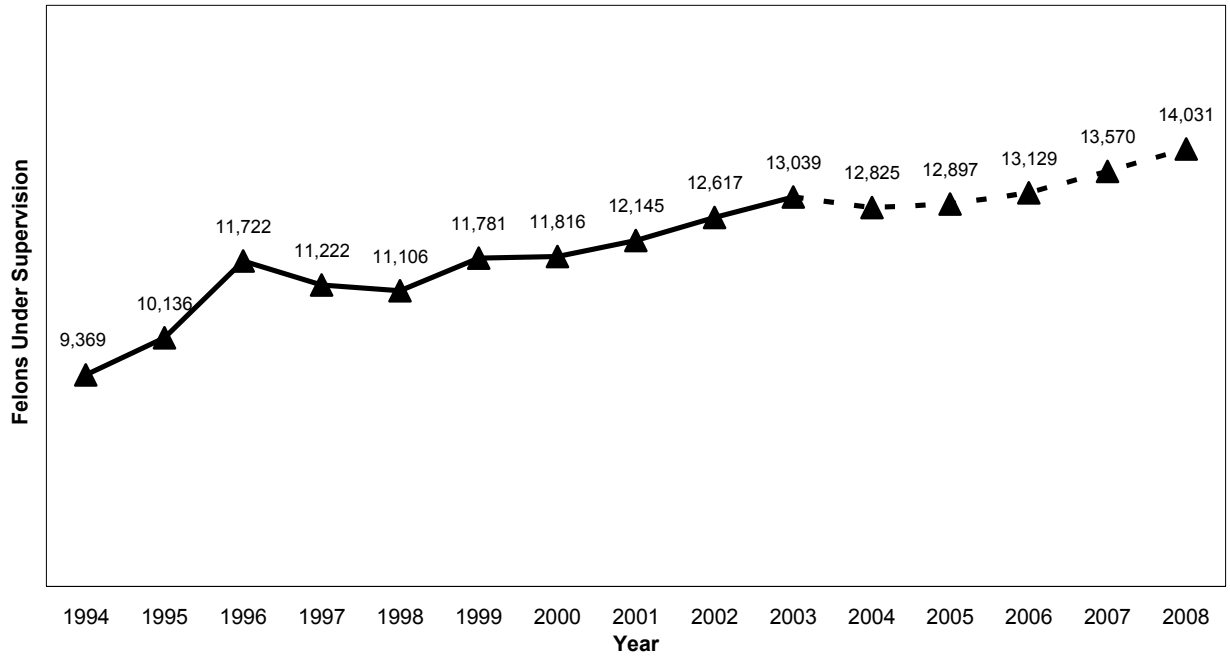
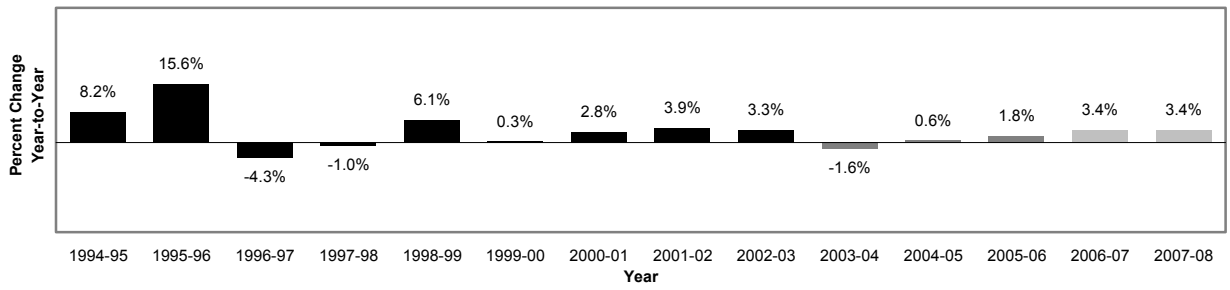


Chart 13-2. Percent Change Year-to-Year Trends & Projections (1994-2008)



Trends from 1994-2003:

- The number of felony probationers under supervision has increased 39.2% over the past decade. A large increase occurred in the years 1994-1996 (25.1%), and thereafter growth has slowed (between 1996 and 2003, the rate was 11.2% for the period).

Projections for 2004-2008:

- *The number of felony probationers under supervision is expected to grow, but will continue to be characterized by low rates of growth. For the 2004-2008 period, the population is expected to grow by 992, or 7.6% during that period.*
- *What the 2002 model projected for 2003: 12,746*

Chart 14-1. New Felony Probation Sentences
Trends & Projections (1994-2008)

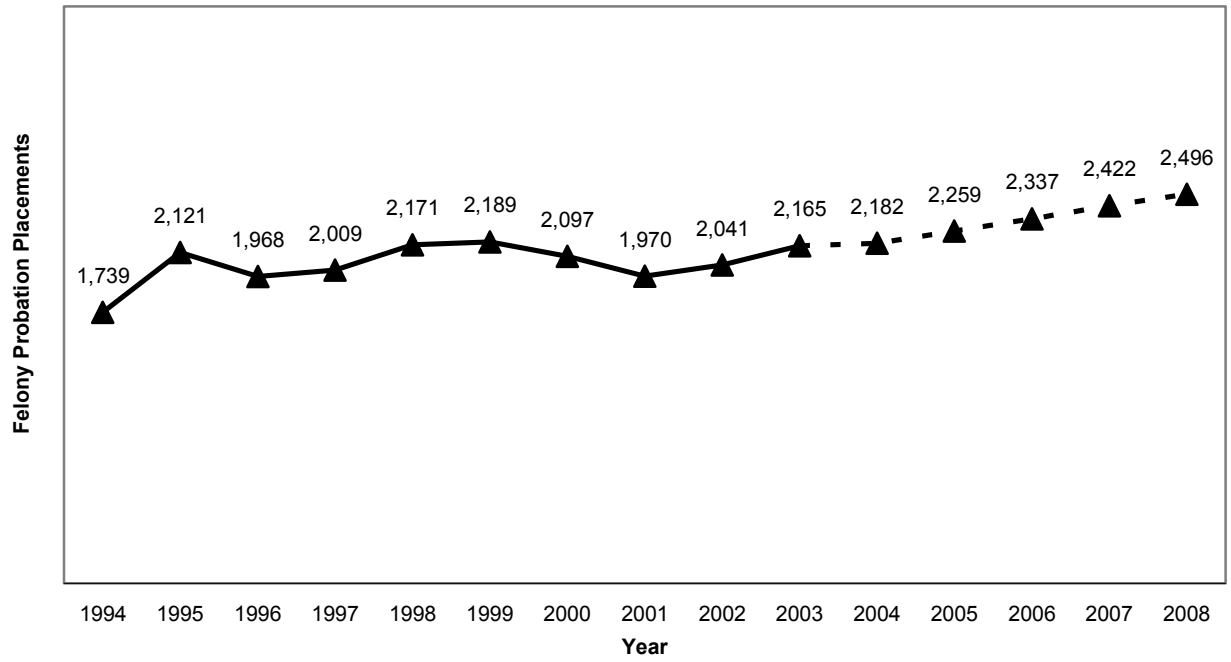
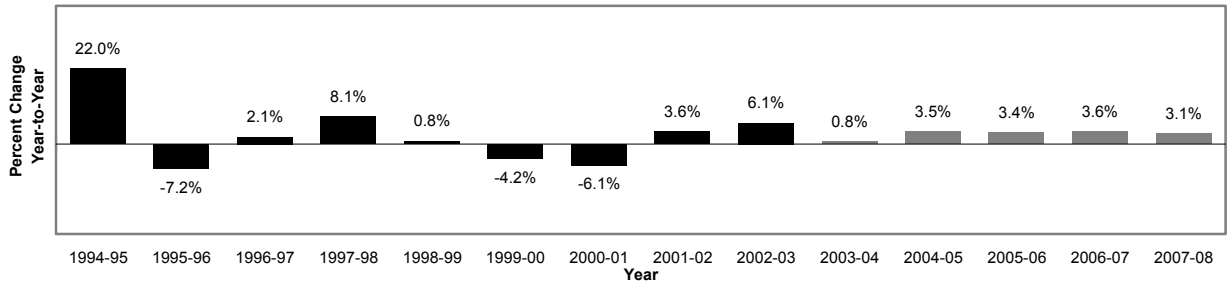


Chart 14-2. Percent Change Year-to-Year
Trends & Projections (1994-2008)



Trends from 1994-2003:

- Sentencing of felons to probation has increased 24.5% during the past decade, from 1,739 in 1994 to 2,165 in 2003. A substantial rise was experienced in 1995; thereafter, increases have been small. In 2002-2003, the number of felony probation sentences increased 6.1% over the year before, making two successive years of increases.

Projections for 2004-2008:

- *Projected sentences to felony probation are expected to continue showing increases. This figure is expected to go up by 331 in the next five years, or an increase of 15.3%. The number of felony probation sentences is tied to current sentencing and conviction trends and projected arrests which is, in turn, linked to projected population trends for the age group most highly correlated with the offenses captured in the model.*
- *What the 2002 model projected for 2003: 2,111*

Chart 15-1. Total Felony Probation Revocations, Re-Sentenced to Prison
Trends & Projections (1994-2008)

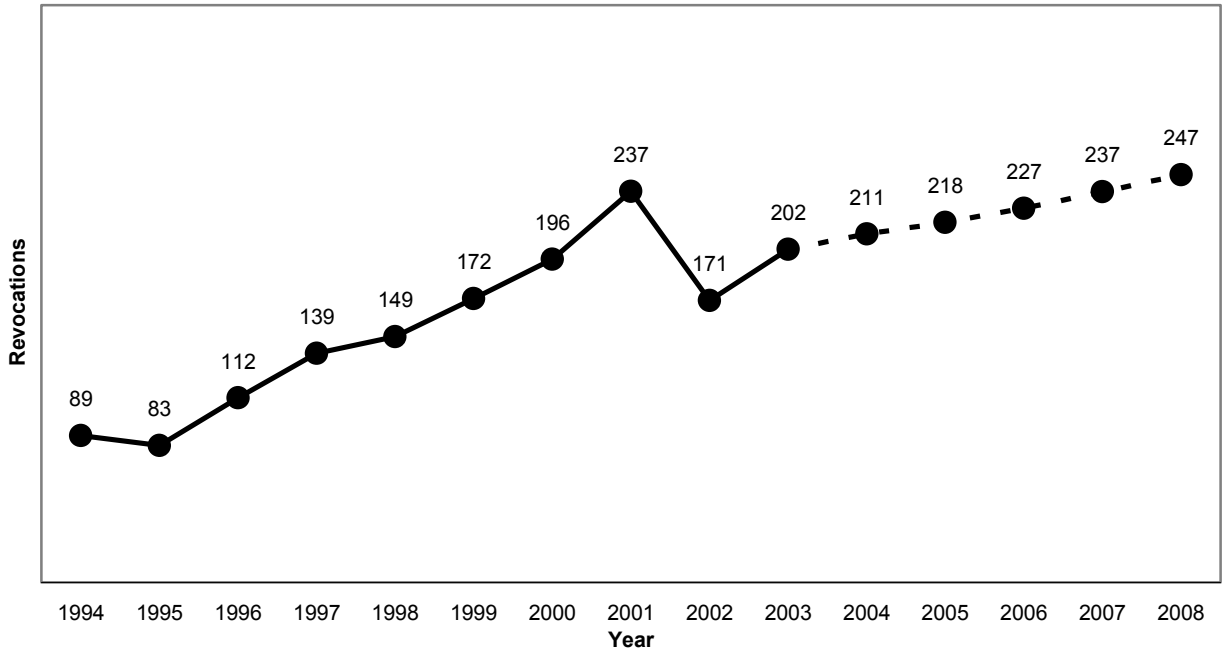
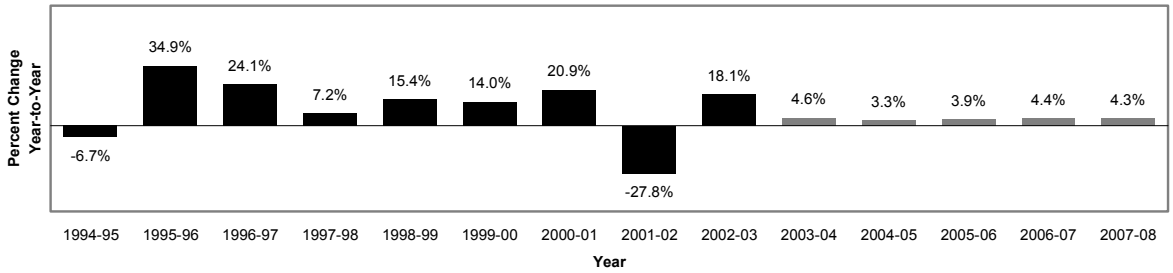


Chart 15-2. Percentage Change Year-to-Year
Trends & Projections (1994-2008)



Trends from 1994-2003:

- The number of felony probationers who have their probation revoked and are re-sentenced to prison has increased by 127.0% during the past 10 years. There was a break in the trend in 2002, but overall the trend is toward increased growth.
- The number of probation revokees that are re-sentenced to prison, in any given year, is overall a very small amount of the probation population (1.6% in the year 2003). So, large percentage increases should be tempered by the understanding that these numbers are small, and that large percentage increases occur with even small gains.

Projections for 2004-2008:

- *Probation revocations are expected to increase by 22.3% in the next 5 years, though this also shows that the rate of growth will be less than the recent past.*[7]
- *What the 2002 model projected for 2003: 180*

[7] The benchmark used for projecting probation revocations, ratios of failure from year-to-year, is based on the failure rates reported in the 2000 study, "Felony Probation in Hawaii" (Crime Prevention & Justice Assistance Division, Department of the Attorney General). See references for full citation.

The number of felony offenders sentenced and convicted to either prison or probation is directly related to arrests for felony offenses. Despite a -11.2% decrease in the number of arrests during the past decade, as captured by the simulation model, total felony convictions have increased by 31.6% during the timeframe, up from 2,340 in 1994 to 3,079 in 2003. Between 1994 and 1999, the biggest increases were experienced, up 26.7% during this timeframe, peaking in 1999 at 3,107. Over the past few years, these sizeable increases have slowed, though there has been an increase of 15.0% in the past two years. It is projected that the overall trend of increases in felony convictions will continue during the next five years, increasing by 15.8% during that span to 3,566 in 2008. These numbers are reflected in projected increases in arrests measured by the model, a function of population increases in the age group most highly correlated with arrest. As mentioned previously, the number of arrests for the offenses outlined in the simulation model has declined during this period by -11.2%. The past year though has shown a 3.0% increase in these arrests, the first significant increase since 1996-97. If arrest trends fluctuate widely from those projected, this will impact the projected number of felony convictions.

Over the past decade, the percentage of convictions to arrest (as measured in the model), has increased from 17.1% in 1994 to 25.4% in 2003. There was a significant increase in the conviction rate between 1997 and 1999, going from 18.9% to 26.5%. This rate has increased slightly in the past two years. The model has built in that this rate will continue along the lines of the two most recent years – projected out at 25.0% for subsequent years.

There has been a slight increase in the proportion of offenders being sentenced to prison as opposed to probation. In 1995 the percentage of convictions sentenced to prison was 19.9%; this increased over the next four years up to a percentage of 29.5% (i.e., 70.5% of the convictions for that year were sentences of probation). After two years of decrease, this ratio has increased in the past two years, now up to 29.7%. The rate built into the model reflects this recent level and has been placed at 30.0% for the projections.

During the past decade, sentences to probation increased by 24.5% while sentences to prison increased by 52.1%. Between 1995 and 1999, there was a substantial increase in prison sentences, increasing by 73.9% during this time, from 528 in 1996 up to 918 in 1999. This sharp gain dissipated in the following years, but has increased the past two years by 29.3%. It is projected that sentences to probation will increase 15.3% in the next five years, and that sentences to prison will increase 17.1%.

Chart 16-1. Total Felony Convictions
Trends & Projections (1994-2008)

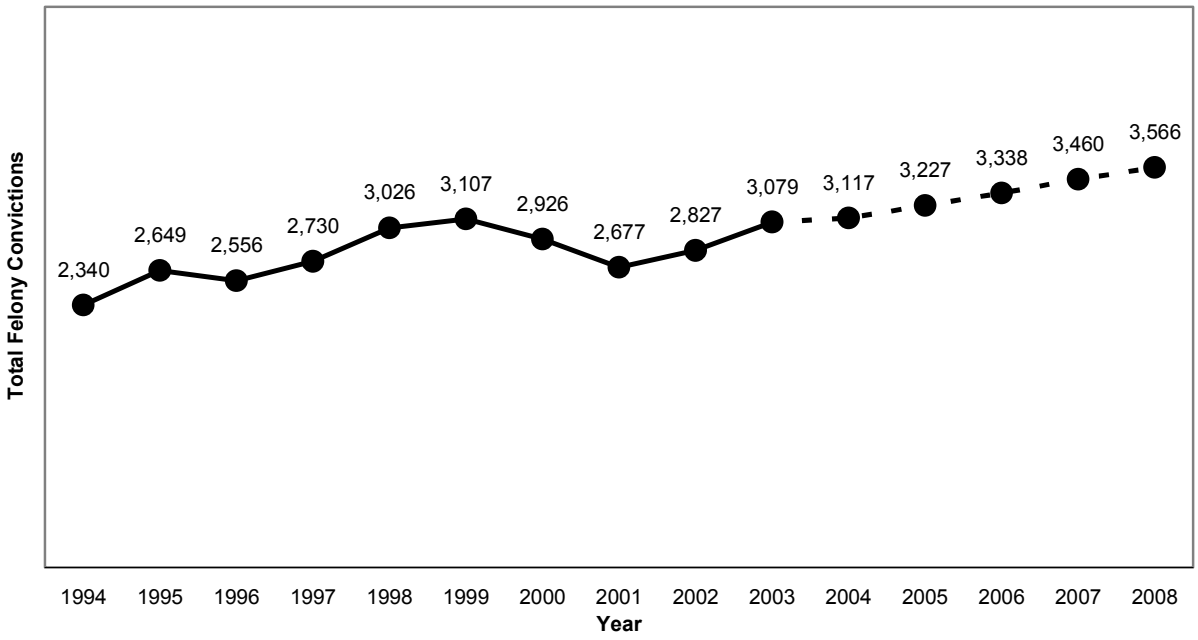
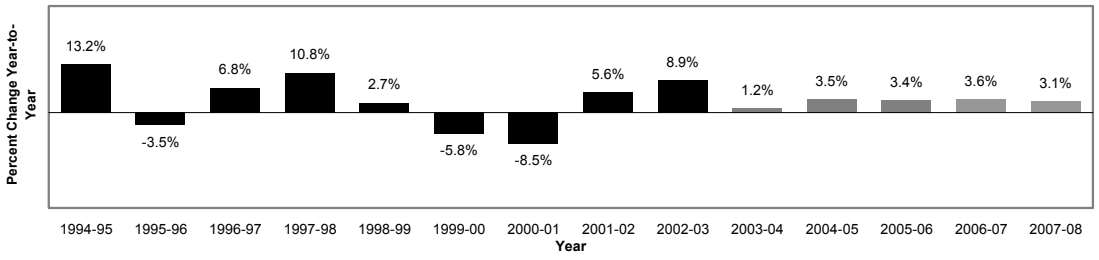


Chart 16-2. Percent Change Year-to-Year
Trends & Projections (1994-2008)



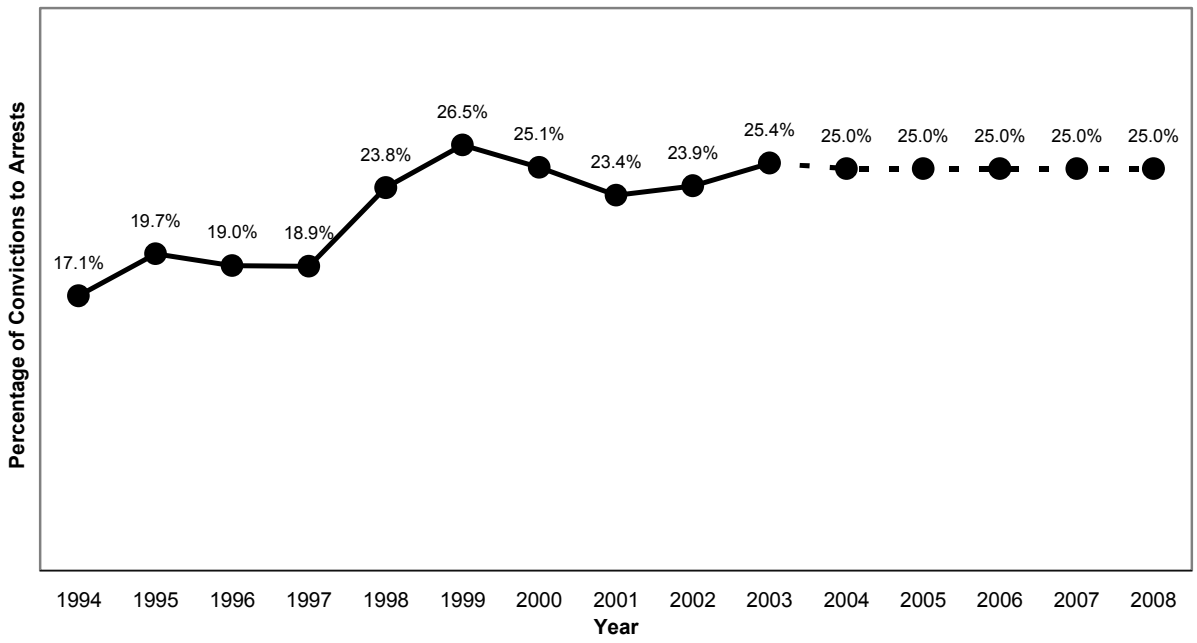
Trends from 1994-2003:

- During this period, there was a 31.6% increase in the number of felony convictions. A large increase occurred between 1994 and 1999, up 32.8%; these large increases gave back to decreases in the next 2 years. The past two years have shown these increases resuming, up by 15.0% during that time.

Projections for 2004-2008:

- *It is projected that total felony convictions will continue the general upward trend experienced in the previous decade. The number of felony convictions is expected to increase by 15.8% in the next five years, reaching 3,566 in the year 2008. Total felony convictions are based on projected arrests. Historically, arrests have been on the decline over the past decade, despite an increase in the most recent year. The arrests projected in the simulation model are a function of most recent arrest trends in combination with projected population figures for the age group most highly correlated with arrest. Significant fluctuations in arrest rates will have an impact on the model.*
- *What the 2002 model projected for 2003: 2,932*

Chart 17-1. Percentage of Convictions to Arrest Trends & Projections (1994-2008)



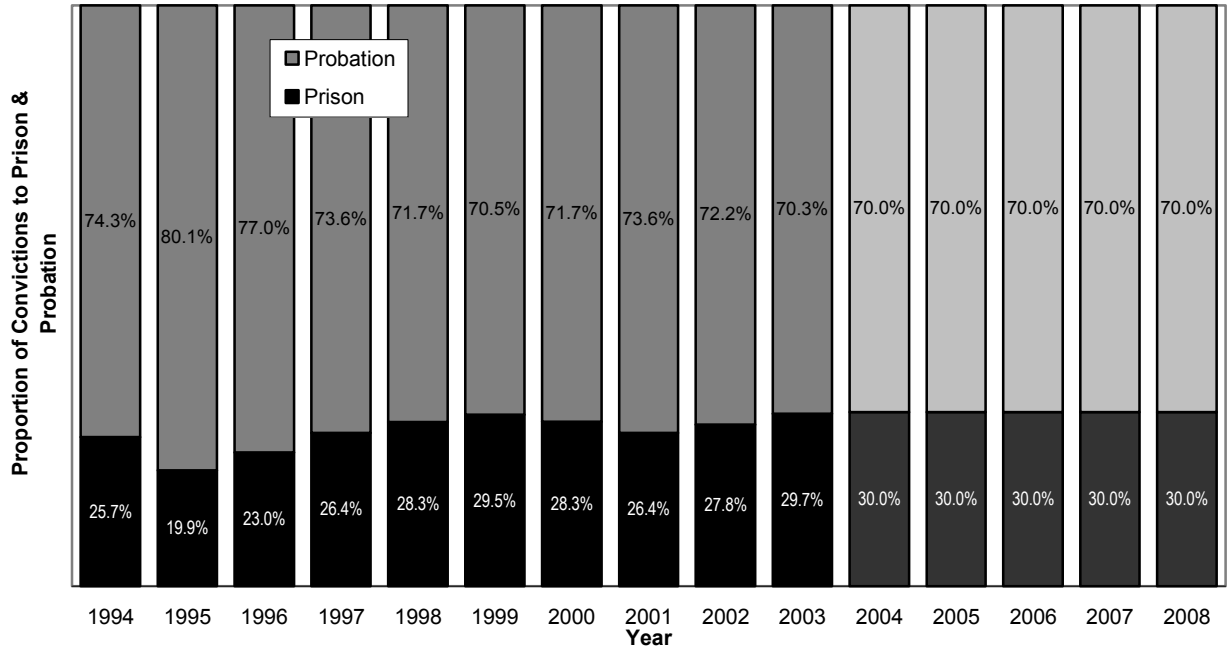
Trends from 1994-2003:

- The percentage of convictions to arrest has increased over the past ten years, from 17.1% at the beginning of the period to 25.4% last calculated for 2003.
- The arrest to conviction rate was under 20% prior to 1997. After two years of significant increases in the rate, it appears to be rooted in the mid-20% range.
- For 2002 and 2003, the percentage or convictions to arrest increased from 23.9% to 25.4%.

Projections for 2004-2008:

- *It is projected that the percentage of convictions to arrest will remain at the level experienced in the last couple of years. For purposes of the projection, this rate is assumed to hold constant current policies and practices, so the level is to be held steady at 25.0%.*
- *What the 2002 model used as the assumed rate for 2003-2007: 24.0%*

Chart 18-1. Proportion of Convictions Sentenced to Prison or Probation Trends & Projections (1994-2008)



Trends from 1994-2003:

- The proportion of convictions sentenced to prison or probation has seen in general a slight increase toward prison sentences over the past decade. In 1994, 25.7% of felony convictions were sentenced to prison and by the end of the period in 2003, this rate had increased to 29.7%.
- After a notable drop in the proportion of prison sentences occurred in 1994-1995, this increased in each of the next four years. The proportion has averaged around a 72%/28% probation-prison ratio over the past three years and has increased the past two years, up to a level of 29.7% last year.

Projections for 2004-2008:

- *It is projected that the ratio of convictions sentenced to prison or probation will continue in the same proportions demonstrated in the past few years, taking into consideration the recent trend upward. For purposes of the projection, this rate is assumed to hold constant current policies and practices, so the level is to remain steady at 70%/30% probation-prison ratio.*
- *What the 2002 model used as the assumed rate for 2003-2007: 72%/28%*

Chart 19-1. Sentences to Prison & Felony Probation
Trends & Projections (1994-2008)

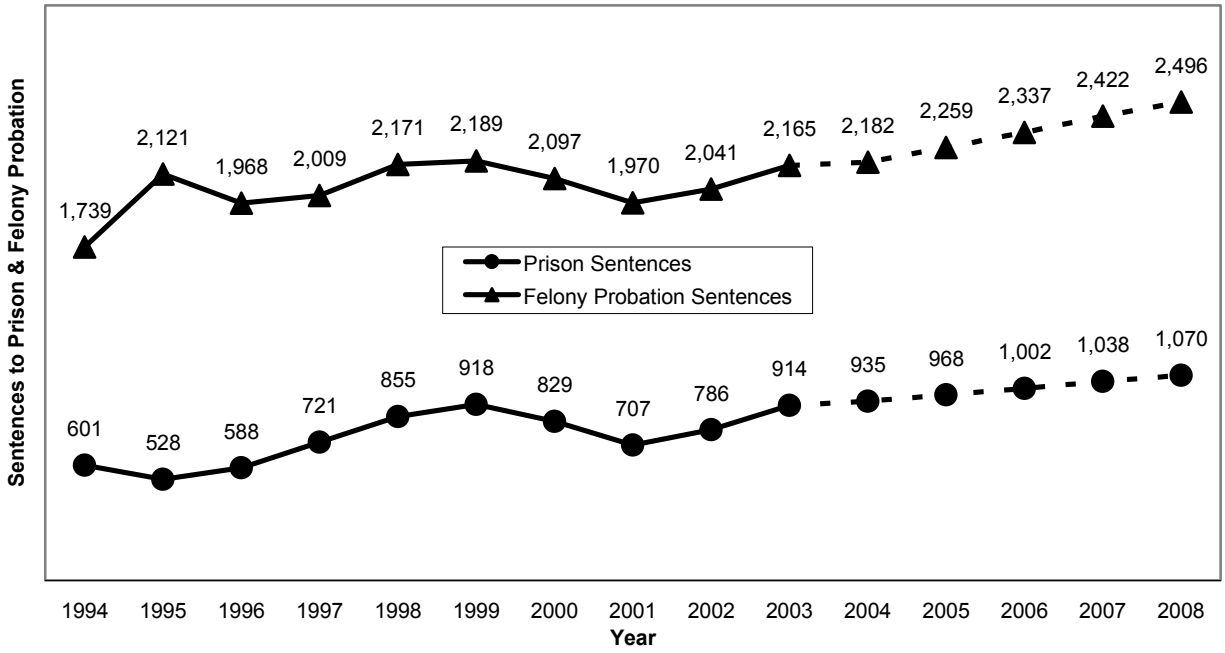


Chart 19-2. Sentences to Prison: Percent Change Year-to-Year
Trends & Projections (1994-2008)

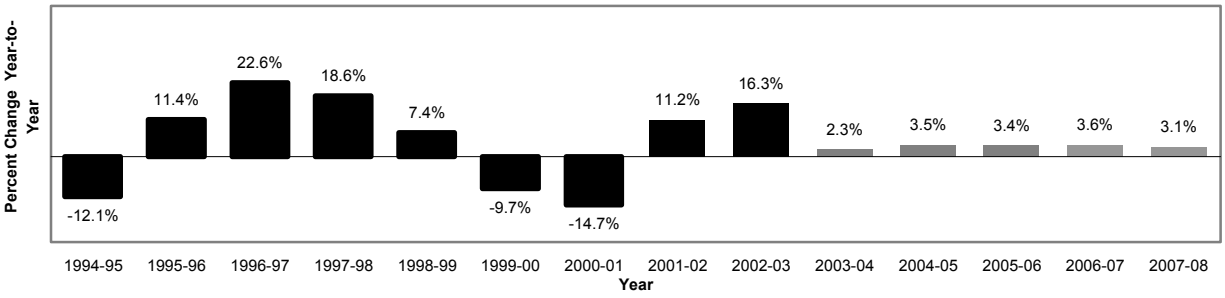
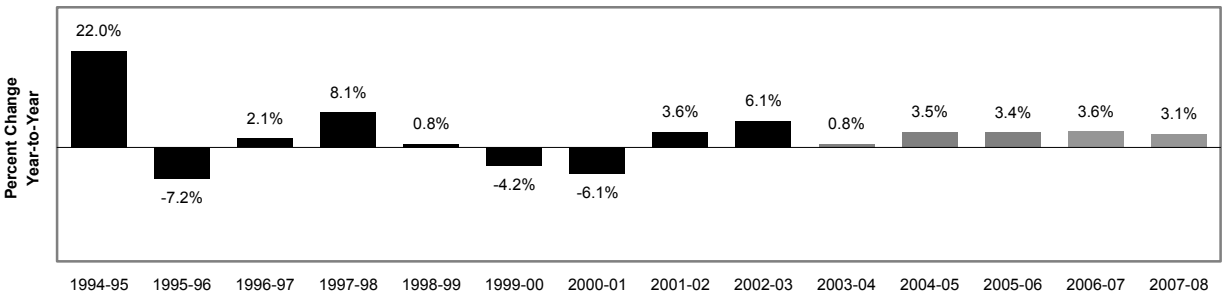


Chart 19-3. Sentences to Felony Probation: Percent Change Year-to-Year
Trends & Projections (1994-2008)



Trends from 1994-2003:

- Felony sentences to prison and probation have both increased over the past decade. Sentences to probation have increased 24.5% during this period, while sentences to prison have increased 52.1%.

- Each sentence type has seen periods of notable increases; for probation, this occurred in 1994-95 while prison sentences increased four consecutive years between 1995 and 1999, and more recently in 2002 and 2003

Projections for 2004-2008:

- *It is projected that the most recent year's rate increases will continue into the next five years. Probation sentences are expected to increase 15.3% by 2008, while prison sentences are anticipated to rise by 17.1%. These numbers are reflected in projected increases in arrests measured by the model, a function of population increases in the age group most highly correlated with arrest. Arrests for the offenses outlined in the simulation model have declined in the previous decade by -11.2%. The past year though has shown a 3.0% increase in these arrests, the first significant increase since 1996-97. If arrest trends fluctuate widely from those projected, this will impact the projected number of felony convictions.*
- *What the 2002 model projected for 2003 Felony Probation Sentences: 2,111*
- *What the 2002 model projected for 2003 Prison Sentences: 821*

Arrests in the State of Hawaii for index offenses[8] have declined for the period of 1994-2003. For purposes of simulation, the model captures arrest data on 22 different offenses.[9] These are specified below:

- Murder
- Rape
- Robbery
- Aggravated Assault
- Burglary
- Motor Vehicle Theft
- Arson
- Forgery
- Fraud
- Embezzlement
- Stolen Property
- Manufacture/Sale of Opiates/Cocaine
- Manufacture/Sale of Marijuana
- Manufacture/Sale of Synthetic Narcotic
- Manufacture/Sale of Non-Narcotic
- Possession Opiates/Cocaine
- Possession Synthetic Narcotic
- Possession Non-Narcotic
- Driving Under the Influence
- Sex Offenses
- Weapons
- Offenses Against Family & Child

There has been a 16.6% decline in these arrests over the past ten years, from 14,286 in 1993 to 11,914 reported in 2002. Including the past year, there has been only two years out of the past ten where arrests increased. From 2001 to 2002, it increased from 11,462 to 11,914, or a 3.9% increase. It is projected that arrests for these offenses will increase 16.5% by 2007, resulting in 1,961 more arrests annually by that time. This figure is based on projected population increases for the age group most highly correlated with arrest, ages 20-34.[10] Historical and projected arrest data by specific offense and projected population figures can be found in the appendix.

[8] This includes murder, rape, robbery, aggravated assault, burglary, motor vehicle theft, arson, and larceny-theft.

[9] The current and historical arrests tabulated by the SSMP are not inclusive of all offenses. It includes 22 offense types which account for roughly 25-30% of all arrests on any given year. The model has selected these offense types, at the suggestion of Dr. Pablo Martinez, as these have been shown to be most indicative of trends and patterns in the criminal justice system in response to the arrest and the carrying out of sanctions.

[10] Correlation coefficient value of .9008.

Chart 20-1. Adult Arrests, Selected Offenses Used in the Simulation Model
Trends & Projections (1994-2008)

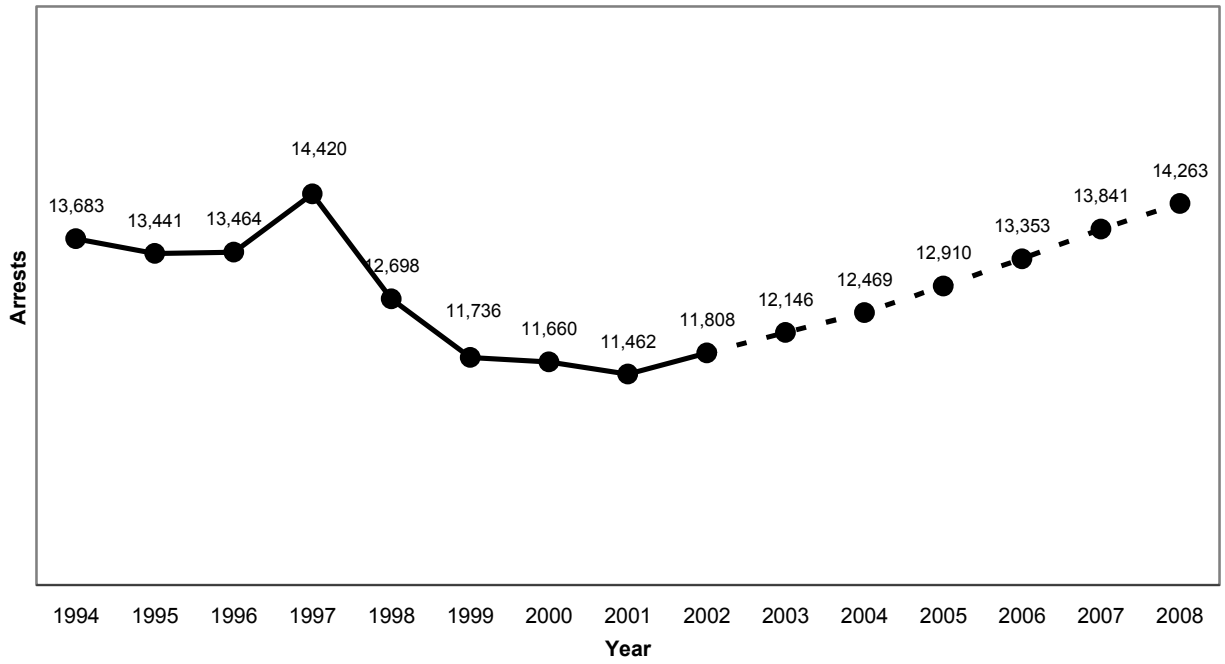
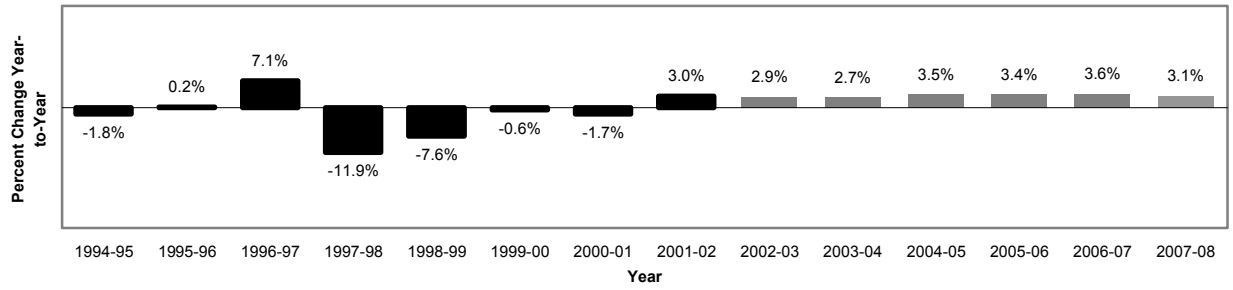


Chart 20-2. Percent Change Year-to-Year
Trends & Projections (1994-2008)



Trends from 1994-2002:

- Arrests have declined during this period by -11.2%. Last year showed the first increase in the past four years, up 3.0%.

Projections for 2003-2008:

- *Adult arrests for these 22 offenses are expected to increase 20.1% through the year 2008, approaching levels experienced five years previous. This figure is based on projected population increases of the age group (20-34) most highly correlated[11] with arrest, and assumes that current policing, reporting, and arrest trends will remain stable during this timeframe. Wide fluctuations in these areas will impact the projected arrests. Population forecasts are located in the appendix.*
- *What the 2002 model projected for 2002: 11,914*

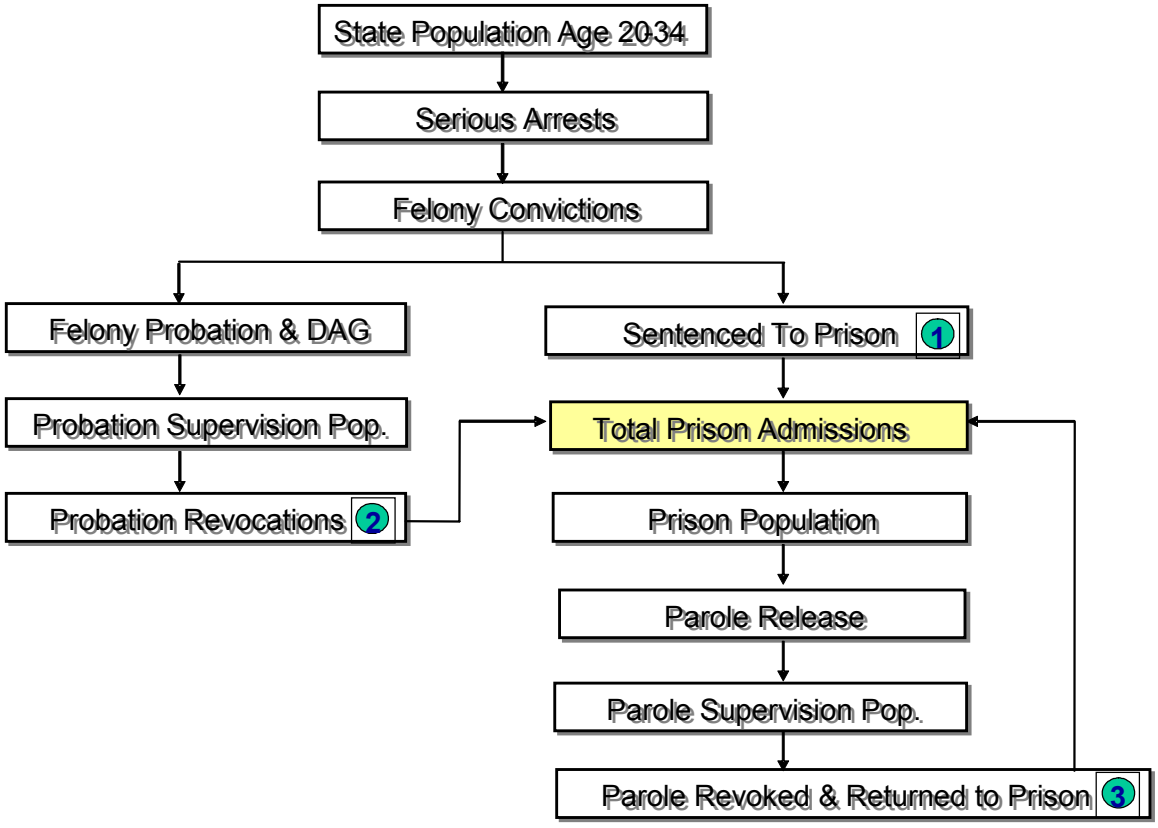
[11] Correlation coefficient value of .9062.

METHODOLOGY

The projections generated from the simulation model is based on the flow of offenders into the system and then linked within. The figure below outlines the basis for creating prison and community supervision population forecasts. In logical sequence, the process follows the following schema:

- Historical and projected population figures are gathered for all age groups.
- Adult arrest data is captured for 22 offenses measured by the model.
- Using historical arrest and population figures, various age groups are collapsed in order to find the group that is most highly correlated with historical arrest data. For this model, the age group most highly correlated was 20-34 years of age.
- With projected population data, projected arrests are then generated.

Figure 1. Methodology Flowchart



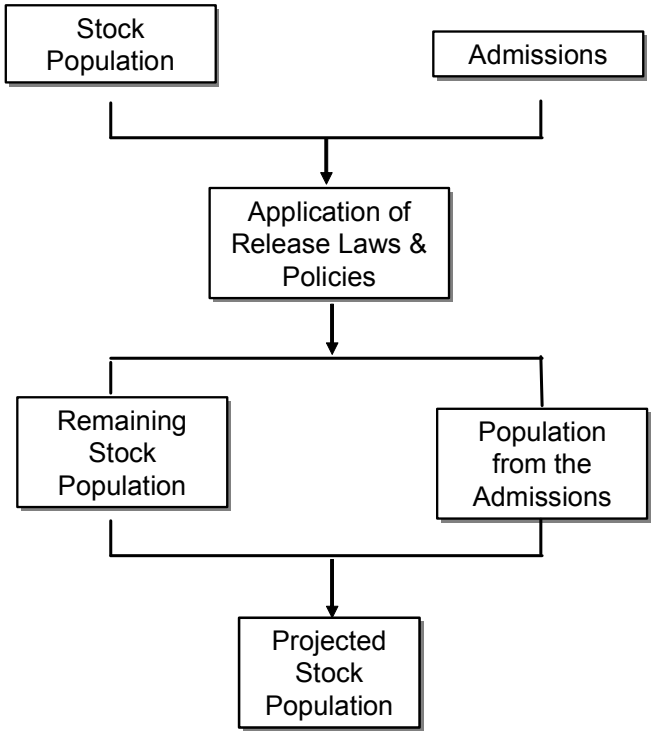
- Historical data on felony sentencing and conviction trends is gathered, and assumed future trends are applied to the projected arrest data. This will produce projections of felons sentenced to prison directly from the courts and those sentenced to probation. (note: the points of entry into the prison population are noted by the numbers, “1”, “2”, and “3”).

(continued on next page)

- Projected probation sentences (placements) are then used to produce the future probation population under supervision, along with projected probation revocations and average length of time on probation. Benchmarks on probation failure rates and construction of survival tables of probationers on probation are then used to generate probation revocations that are re-sentenced to prison.
- Historical and current data on prison is collected: population, admissions, and releases. Using data on the current population and the projected admissions by specific offense, prison releases are projected. The production of projected releases to parole, then allows one to ascertain the future parole population under supervision, along with projected parole revocations and average length of time on parole. Benchmarks on parole failure are then used to generate parole revocations that are returned to prison.
- Projected admissions to prison are then produced from the three points of entry. These are lined up and adjusted in concert with reported prison admissions.
- With projected prison admissions and releases, projections of the prison population are then produced. Again, linkage between the sources of inputs and outputs are joined and adjusted to ensure the integrity of the model is upheld and trends accounted for and synchronized at all points of the model.

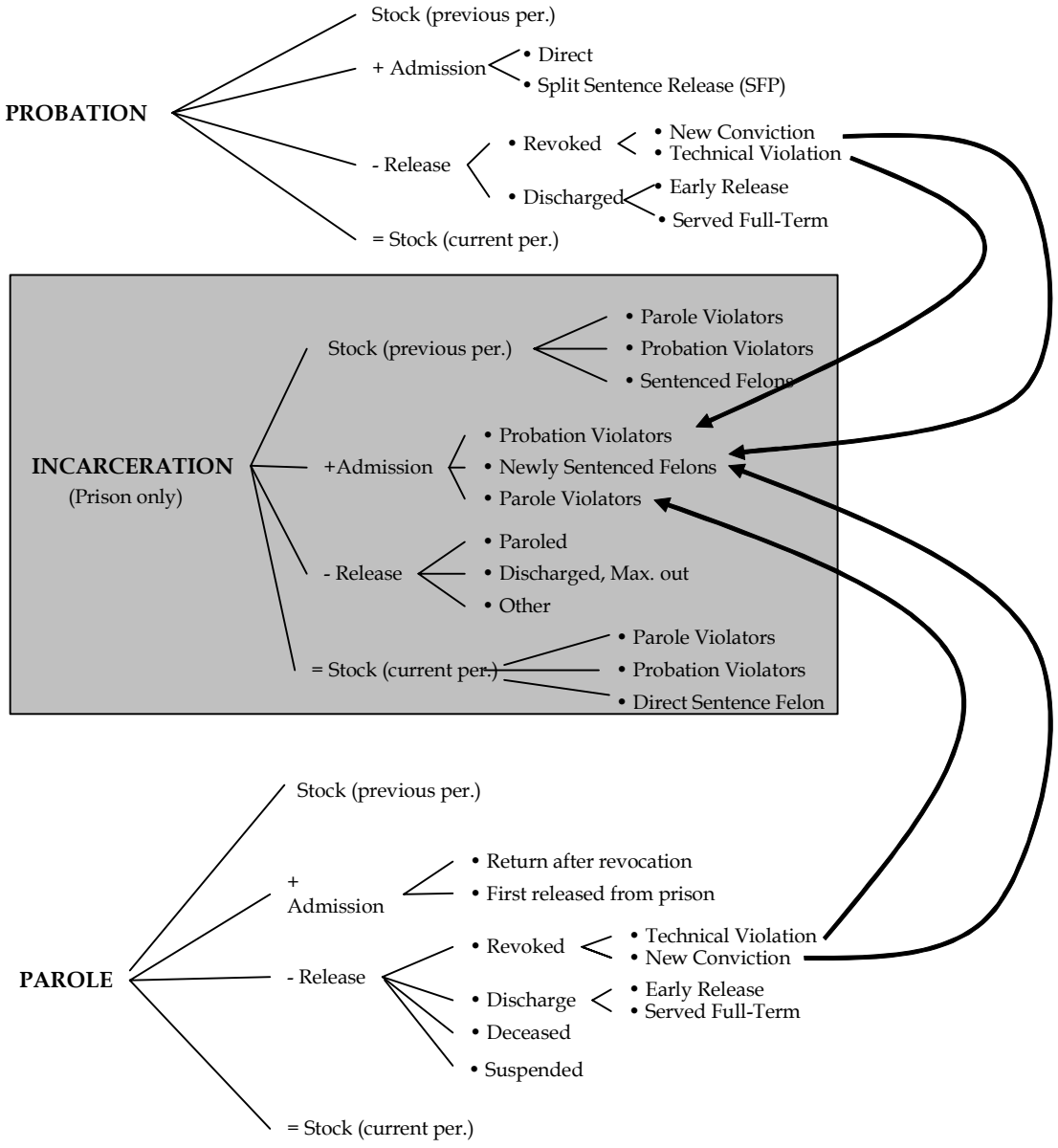
The below figure is a simplified flow chart of how the prison population is projected without including all of the separate inputs from parole and probation.

Figure 2. Methodology Flow Chart of Prison Population Projections



This figure outlines the flows to and from the prison and community supervision populations, and how they are interrelated in the projection model. This does not include the state population projections and the arrest projections produced beforehand. However, this gives a plain overview of the interactions and linkages between the separate parts that are considered in the model, captured, and used in producing projections.

Figure 3. Methodology Flow Chart of System Populations



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APPENDIX A:

Historical Figures & Projections of Arrest by Offense Type

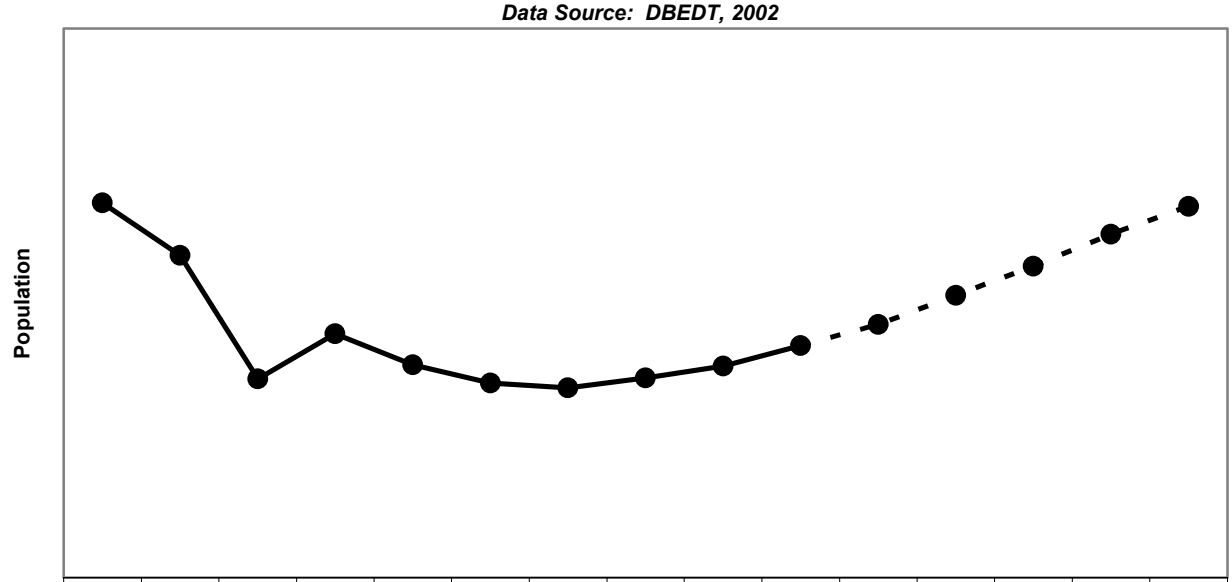
Population Projections

Table B-1: Historical & Projected Adult Arrests by Specific Offense (1993-2007)

Offense	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
murder	54	58	42	42	18	49	40	29	32	35	36	37	39	40	41
rape	123	92	113	108	111	88	88	119	120	114	117	121	125	130	134
robbery	315	388	379	361	375	293	344	320	335	347	357	369	382	396	408
aggravated assault	505	587	500	598	506	569	626	601	592	633	649	672	696	721	743
burglary	895	860	893	946	744	614	608	602	605	631	648	671	694	719	741
motor vehicle	1,341	1,447	1,022	1,048	874	672	903	1,012	1,239	1,096	1,125	1,165	1,205	1,249	1,287
arson	29	33	28	15	26	13	27	15	18	21	21	22	23	24	24
forgery	378	368	416	410	382	345	437	563	533	533	548	567	586	608	626
fraud	565	532	567	596	543	440	433	518	499	504	518	536	555	575	592
embezzlement	76	59	63	53	36	35	38	41	60	48	50	51	53	55	57
stolen property	181	317	248	192	135	75	93	136	189	145	149	154	160	165	170
m/s opiates/cocaine	461	398	401	351	354	363	320	294	194	281	289	299	309	321	331
m/s marijuana	154	155	126	176	129	108	116	97	96	107	110	114	118	122	126
m/s synthetic narcotic	17	22	38	36	21	44	22	12	30	22	23	24	24	25	26
m/s non-narcotic	37	75	66	100	69	122	177	175	183	186	191	198	205	212	218
poss. opiates/cocaine	1,195	1,070	1,135	1,206	786	647	535	444	484	509	522	541	559	580	597
poss. synthetic narcotic	69	124	155	254	255	247	181	88	163	150	154	159	165	171	176
poss. non-narcotic	304	216	175	315	188	190	477	697	721	659	677	700	725	751	774
dui	4,267	4,057	4,706	5,065	4,750	4,717	4,165	3,672	3,672	4,002	4,109	4,254	4,400	4,561	4,700
sex offenses	337	310	293	311	329	361	259	336	369	335	344	356	368	382	394
weapons	573	447	359	343	305	221	287	279	301	301	309	320	331	343	354
family & child (v. offenses)	1,807	1,826	1,739	1,894	1,762	1,523	1,484	1,412	1,373	1,485	1,524	1,578	1,632	1,692	1,744
Total	13,683	13,441	13,464	14,420	12,698	11,736	11,660	11,462	11,808	12,146	12,469	12,910	13,353	13,841	14,263

Chart B-1. Population Trends (1994-2008) for Correlated Age Group

Data Source: DBEDT, 2002



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
20-34	268,239	258,655	236,184	244,417	238,758	235,457	234,563	236,342	238,517	242,223	246,107	251,386	256,706	262,549	267,616

Year / Actual & Projected Figures

APPENDIX B:

Definitions of Criminal Offenses Used in the Model Projections

DEFINITIONS OF CRIMINAL OFFENSES USED IN PROJECTIONS

AGGRAVATED ASSAULT: An unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury; attempted murder. This type of assault usually is accompanied by the use of a weapon or by means likely to produce death or great bodily harm. It is not necessary that injury result from an aggravated assault when a gun, knife, or other weapon is used which could and probably would result in serious personal injury if the crime were successfully completed. Attacks by personal weapons, such as hands, fists, feet, etc., which result in serious or aggravated injury.

ARSON: Any willful or malicious burning or attempt to burn, with or without intent to defraud, a dwelling house, public building, motor vehicle or aircraft, personal property of another, etc.

BURGLARY: The unlawful entry of a structure to commit a felony or a theft. Includes forcible entry, unlawful entry where no force is used, and attempted forcible entry where no entry occurs.

DRIVING UNDER THE INFLUENCE: Driving or operating any vehicle or common carrier while drunk or under the influence of intoxicants.

DRUG ABUSE VIOLATIONS: Include all violations of state and local laws relating to the unlawful possession, sale, use, growing, manufacturing, and making of illegal drugs.

EMBEZZLEMENT: Misappropriation or misapplication of money or property entrusted to one's care, custody, or control.

FORCIBLE RAPE: The carnal knowledge of a female forcibly and against her will. Assaults or attempts to commit rape by force or threat of force are also included. Statutory rape (without force), any sexual assaults against males, and other sex offenses are not included in this category.

FORGERY AND COUNTERFEITING: All offenses dealing with the making, altering, uttering, or possession of, with intent to defraud, anything false in the semblance of what is true.

FRAUD: Fraudulent conversion and obtaining money or property by false pretenses. Includes bad checks (except forgeries and counterfeiting), confidence games, and unauthorized withdrawal of money from an automatic teller machine.

MOTOR VEHICLE THEFT: The theft or attempted theft of a motor vehicle.

MURDER: The willful (non-negligent) killing of one human being by another.

OFFENSES AGAINST THE FAMILY AND CHILDREN: Include all charges of nonsupport, and neglect or abuse of family and children. Examples include desertion, abandonment, or nonsupport of spouse or child; neglect or abuse of spouse or child; and nonpayment of alimony.

ROBBERY: The taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim(s) in fear. While robbery has the attributes of a property crime, it is grouped with violent crimes due to the additional attribute of force or the threat of force.

SEX OFFENSES: Include indecent exposure, incest, statutory rape (no force), any sexual assaults against males, other offenses against common decency and morals, and all attempts. Do not include forcible rape, prostitution, and commercialized vice.

STOLEN PROPERTY: Buying, receiving, and possessing stolen property, including attempts.

WEAPONS OFFENSES: Include unlawful manufacture, sale, or possession of deadly weapons; unlawful carrying of deadly weapons, concealed or openly; using, manufacturing, etc. silencers; furnishing deadly weapons to a minor; and all attempts to commit any of the above.

APPENDIX C:

Simulations Completed in FY 2003

1) Application of California 3-Strikes Law to Hawaii
2) Application of Federal 3-Strikes Law to Hawaii
3) Application of New Jersey 3-Strikes Law to Hawaii
4) Impact of ACT 161 & Discontinuation
5) Impact of ACT 161 & Discontinuation and Doubling Mandatory Minimums
6) Senate Concurrent Resolution 86 – Habitual Violent Felons